

SEQUENCE LISTING



<110> PUNNONEN, JUHA
 LAZETIC, ALEXANDRA
 LEONG, STEVEN R.
 CHANG, CHIA-CHUN
 APT, DORIS
 GUSTAFSSON, CLAES

<120> NOVEL CO-STIMULATORY MOLECULES

<130> 02-106730US

<140> 10/032,214

<141> 2001-12-20

<150> 09/888,324

<151> 2001-06-22

<150> PCT/US01/19973

<151> 2001-06-22

<150> 60/213,946

<151> 2000-06-23

<150> 60/241,245

<151> 2000-10-17

<160> 320

<170> PatentIn Ver. 2.1

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<211> 891

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<220>

<223> Description of Artificial Sequence: Synthetic
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tctgtgatca	ttgcagttat	actaacatgc	ctgacctgca	gaaatgctgc	aatacgcaga	840
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

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<210> 3
<211> 900
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

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<210> 4

<211> 912
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

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atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctcta ctggttgga 540
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tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtc tttggtgtc 780
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<210> 5

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 5

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acaaaagag tgaaagaaac agtaatgcta tcctgtgatt acagcacatc cactgaagaa 180
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<210> 6

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 6

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cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tggcttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
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<210> 7

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 7

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acaaaaagag tgaaagaaac agtaatgcta tctgtgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaaag gatagtaaaa tgggtgctggc catcctgcct 240
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<210> 8

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 8

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cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tggcttcctg gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctctg ctggttgga 540
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actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtggaa aagaacaaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
tcctcgggct ga 912
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<210> 9

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 9

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tcctcgggct ga 912
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<210> 10

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 10

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acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
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tcctcgggct ga 912
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<210> 11

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 11

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<210> 12

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 12

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acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
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cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tggcttccgt gaggttaatg 420
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aaaaggataa gatgtccgc ctctggagggt tttccagagc ctgcctcgc ctggatggaa 540
gatggagaag aactaaacgc cgtcaacacg acggttgacc aggatttgga cacggagctc 600
tacagcgtca gcagtgaact ggattccaat gtgacaaata accacagcat cgtgtgtctc 660
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<210> 13

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 13

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acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
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<210> 14

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 14

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atgggtcaca caatgaagtg gcgatcacta ccacccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acagcacatc cactgaggaa 180
ctgacaagcc ttcggatcta ttggcaaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tgacttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctcta ctggttggaa 540
aatggagaag aattaaatgc taccaacaca aactgtccc aagatcctgg aactgagctc 600
tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtc tttgggtgctc 780
actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtggaa aagaacaaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
tcctcgggct ga 912
```

<210> 15

<211> 909

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 15

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atgggtcaca caatgaagtg gggatcacta ccacccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacgcata cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacaagg gcacctacac ctgcgtgggt 360
cagaagaatg agaacgggtc tttcagacgg gagcacctga cctccgtgac actgtccatc 420
agagctgact tccctgtccc tagcataact gacattggac atcccgcgcc taatgtgaaa 480
aggataagat gctccgcctc tggaggtttt ccagagcctc gcctcgcttg gatggaagat 540
ggagaagaac taaacgccgt caacacgacg gttgaccagg atttgacac ggagctctac 600
agcgtcagca gtgaactgga tttcaatgtg acaaataacc acagcatcgt gtgtctcatc 660
aaatacgggg agctgtcggg gtcacagatc ttccttggga gcaaaccxaa gcaggagcct 720
cccattgate agcttccatt ctgggtcatt atcccagtaa gtggtgcttt ggtgctcact 780
gcggtagttc tctactgcct ggctgcaga catgttgca ggtggaaaag aacaagaagg 840
aatgaagaga cagtgggaac tgaaaggctg tcccctatct acttaggctc tgcgcaatcc 900
tcgggctga 909
```

<210> 16

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

nucleotide sequence

<400> 16

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atgggtcaca caatgaagtg gggatcacta ccacccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acagcacatc cactgaagaa 180
ctgacaagcc ttcgatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcttgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tggcttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctcta ctggttgga 540
aatggagaag aattaaatgc taccaacaca acagtttccc aagatcctgg aactgagctc 600
tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtgc tttgggtgctc 780
actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtggaa aagaacaaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
tcctcgggct ga 912
```

<210> 17

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 17

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atgggtcaca caatgaagtg gggatcacta ccacccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acagcacatc cactgaagaa 180
ctgactagcc ttcgatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcttgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tggcttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccagagc ctgcctcgc ctggatggaa 540
gatggagaag aactaaacgc cgtcaacacg acggttgacc aggatttga caggagctc 600
tacagcgtca gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtgc tttgggtgctc 780
actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtggaa aagaacaaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
tcctcgggct ga 912
```

<210> 18

<211> 903

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 18

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atggggccaca cgctgaggcc gggaactcca ctgcccaggt gtctacacct caagctctgc 60
ctgctcttgg cgctggcggg tctccacttc tcttcaggta tcagccaggt caccaagtcg 120
gtgaaagaaa tggcggcact gtcctgtgat tacaacatct ctatcgatga actggcgaga 180
atgcgcatat actggcagaa ggaccaacag atggtgctga gcatcatctc tgggcaagtg 240
gaagtgtggc ctgagtacaa gaaccgcacc atcactgaca tgaacgataa cccccgtatt 300
gtgatcctgg ctctgcgctt gtcggacagt ggcacctaca cctgtgttat tcagaagcct 360
gttttgaaaag gggcttataa actggagcac ctggcttccg tgaggttaat gatcagagct 420
gacttccctg tccctaccat aaatgatctt ggaaatccat ctcctaatat cagaaggcta 480
atctgtcaa cctctggagg ttttccaagg cccacctct actggttga aaatggagaa 540
gaattaaatg ctaccaaac aacagtttcc caagatcctg gaactgagct ctacatgatt 600
agcagtgaac tggatttcaa tgtgacaaat aaccacagca tcgtgtgtct catcaaatac 660
ggggagctgt cgggtgtcac gatcttccct tggagcaaac ccaagcagga gcctccatt 720
gatcagcttc cattctgggt cattatccca gtaagtgggt ctttgggtgt cactgcggtg 780
gttctctact gcctggcctg cagacatgtt gcgaggtgga aaagaacaag aaggaatgaa 840
gagacagtgg gaactgaaag gctgtccctt atctacttag gctctgcgca atcctcgggc 900
tga 903
```

<210> 19

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 19

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atgggtcaca caatgaagtg gggatcacta ccacccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcaactg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggtacta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcaactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcccg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tggcttccgt gaggttaattg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggagggt tttccaaggc cccacctcta ctggttgga 540
aatggagaag aattaaatgc taccaacaca acagtttccc aagatcctgg aactgagctc 600
tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtc tttgggtgtc 780
actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtgga aagaacaaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
tcctcgggct ga 912
```

<210> 20

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 20

```
atggggtcaca caatgaagtg gggatcacta ccacccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcaccoc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcactgacat gaacgataac 300
ccccgtattg tgatcctggc actgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tgacttccgt gaggttaatg 420
atcagagctg acttccctgt cctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctcta ctgggttgaa 540
aatggagaag aattaaatgc taccaacaca acagtttccc aagatcctgg aactgagctc 600
tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtc tttggtgctc 780
gctgcggtag ttctctactg cctggcctgc agacatgttg cgaggtggaa aagaacaaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
tcctcgggct ga 912
```

<210> 21

<211> 909

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 21

```
atggggtcaca caatgaagtg gggatcacta ccacccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcaccoc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acagcacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaaa aaccgcacct tccccgacat cattaacaac 300
ctctccctta tgatcctggc actgcgcctg tcggacaagg gcacctacac ctgcgtgggt 360
cagaagaatg agaacgggtc tttcagacgg gagcacctga cctccgtgac actgtccatc 420
agagctgact tccctgtccc tagcataact gacattggac atcccgcctc taatgtgaaa 480
aggataagat gctccgcctc cggagatttt ccagagcctc gcctcgcctg gatggaagat 540
ggagaagaac taaacgccgt caacacgacg gttgaccagg atttgacac ggagctctac 600
agcgtcagca gtgaactgga tttcaatgtg acaaataacc acagcatcgt gtgtctcatc 660
aaatacgggg agctgtcggg gtcacagatc ttcccttgga gcaaaccctc gcaggagcct 720
cccattgatc agcttccatt ctgggtcatt atcccagtaa gtggtgcttt ggtgctcact 780
gtggtagtgc tctactgcct ggctgcaga catgttgca ggtggaaaag aacaagaagg 840
aatgaagaga cagtgggaac tgaaaggctg tcccctatct acttaggctc tgcgcaatcc 900
tcgggctga 909
```

<210> 22

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 22

```

atggggccaca cacggaggca gggaatatca ccatccaagt gtccatacct caagttcttt 60
cagctcttgg tgctggctgg tctttctcac ttctgttcag gtgttatcca cgtgaccaag 120
gaagtgaaag aagtggcaac gctgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaactcgca tccactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagta caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgaag 360
tatgaaaaag atgctttcaa gcgggaacac ctggctgaag tgacgttatc agtcaaagct 420
gacttccta cacctagtat atctgacttt gaaattccac cttctaacat tagaaggata 480
atttgctcaa cctctggagg ttttcctgag cctcacctct cctggctgga aaatggagaa 540
gaattaaatg ccatcaacac aacagtttcc caagatcctg gaactgagct ctatactgtt 600
agcagcaaac tggatttcaa tatgacaacc aaccacagct tcatgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tgggaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccattcctg ggccattacc ttaatctcag taaatggaat ttttgtgata 780
tgctgcctga cctactgctt tgccccaaga tgcagagaga gaaggaggaa tgagagattg 840
agaagggaaa gtgtacgccc tgtatga 867

```

<210> 23

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 23

```

atggggccaca cacggaggca gggaatatca ccatccaagt gtccatacct caatttcttt 60
cagctcttgg tgctggcttg tctttctcat ttctgttcag gtgttatcca cgtgaccaag 120
gaagtgaaag aagtggcaac gctgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaactcgca tctactggca aaagggaag aaaatggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagta caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgaag 360
tatgaaaaag atgctttcaa gcgagaacac ctggctgaag tgacgttatc agtcaaagct 420
gacttccta cacctagtat aactgacttt gaaattccac cttctaacat tagaaggata 480
atttgctcaa cctctggagg ttttcagag cctcgctct cctgggttga aaatggagaa 540
gaattaaatg ccatcaacac aacagtttcc caagatcctg aaactgagct ctatgctgtt 600
agcagcaaac tggatttcaa tatgacaacc aaccacagct tcatgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tgggaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccattcctg ggccattacc ctaatctcag taaatggaat ttttgtgata 780
tgctgcctga cctactgctt tgccccaaga tgcagagaga gaaggaggaa tgagagattg 840
agaagggaaa gtgtacgccc tgtatga 867

```

<210> 24

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 24

```

atgagccaca cacggaggca gggaacatca ccatccaagt gtccgtacct caagttcttt 60
cagctcttgg tgctggctag tctttctcac ttctgttcag gtgttatcca catgaccaag 120
gaagtgaaag aagtggcaac actgtcctgt ggtcacaatg tttctgttga agagctggca 180

```


caaactcgca	tctactggca	aaaggagaag	aaaatggtgc	tgactatgat	gtctggggac	240
atgaatatat	ggcccagta	caagaaccgg	accatctttg	atatcactaa	taacctctcc	300
attgtgattc	tggctctgcg	cccatctgac	gagggcacat	acgagtgtgt	tgttctgaag	360
tatgaaaaag	atgctttcaa	gcgagaacac	ctggctgaag	tgatgttatc	cgtcaaagct	420
gacttcccta	cacctagtat	aactgacttt	gaaattccac	cttctaacat	tagaaggata	480
atttgctcaa	cctctggagg	ttttccagag	cctcacctct	tctggctgga	aaatggagaa	540
gaattaaatg	ccatcaacac	aacagtttcc	caagatcctg	aaactgagct	ctatgctgtt	600
agcagcaaac	tggatttcaa	tatgacaacc	aaccacagct	tcatgtgtct	catcaagtat	660
ggacatttaa	gagtgaatca	gaccttcaac	tgggaatacaa	ccaagcaaga	gcattttcct	720
gataacctgc	tcccatcctg	ggccattacc	ctaactctcag	taaatggaat	ttttgtgata	780
tgctgcctga	cccactgttt	tgccccaaga	tgcaagagaga	gaaggaggaa	tgagagattg	840
agaagggaaa	gtgtacaccc	tgtatga				867

<210> 25

<211> 868

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 25

atgggccaca	cacggaggca	gggaatatca	ccatccaagt	gtccatacct	caagttcttt	60
cagctcttgg	tgctggcttg	tctttctcat	ttctgttcag	gtgttatcca	cgtgaccaag	120
gaagtgaaa	aagtggcaac	actgtcctgt	ggtcacaatg	tttctgttga	agagctggca	180
caaactcgca	tctactggca	aaaggagaag	aaaatggtgc	tgactatgat	gtctggggac	240
atgaatatat	ggcccagta	caagaaccgg	accatctttg	atatcactaa	taacctctcc	300
attgtgattc	tggctctgcg	cccatctgac	gagggcacat	acgagtgtgt	tgttctgaag	360
tatgaaaaag	acgctttcaa	gcggaacac	ctagctgaag	tgacgttatc	agtcaaagct	420
gacttcccta	cacctagtat	atctgacttt	gaaattccaa	cttctaatat	tagaaggata	480
atttgctcaa	cctctggagg	ttttccagag	cctcacctct	tcgggttgga	aaatggggaa	540
gaaataaatg	ccatcaacac	aacagcttcc	caagatcctg	aaactgagct	ctatactgtt	600
agcagcaaac	tggatttcaa	tatgacaccc	aatcgcagtt	ttgtgtgtct	catcaagtat	660
ggacatttaa	gagtgaatca	gaccttcaac	tgggaatacac	ccaagcaaga	gcattttcct	720
gataacctgc	tcccatcctg	ggccattacc	ttaatctcag	caaatggaat	ttttgtgata	780
tgctgcctga	cctactgctt	tgccccaaga	tgcaagagaga	gaaagagcaa	tgagagactg	840
agaagggaaa	gtgtacgccc	tgtatgag				868

<210> 26

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 26

atgagccaca	cacggaggca	gggaatatca	ccatccaagt	gtccatacct	caatttcttt	60
cagctcttgg	tgctggctag	tctttctcat	ttctgttcag	gtgttatcca	cgtgaccaag	120
gaagtgaaa	aagtggcaac	gctgtcctgt	ggctcfaatg	tttctgttga	agagctggca	180
caaactcgca	tctactggca	aaaggagaag	aaaatggtgc	tgactatgat	gtctggggac	240
atgaatatat	ggcccagta	caagaaccgg	accatctttg	atatcactaa	taacctctcc	300
attgtgattc	tggctctgcg	cccatctgac	gagggcacat	acgagtgtgt	tgttctgaag	360

tatgaaaaag	acgcttttcaa	gcgagaacac	ctggctgaag	tgatgttatc	cgtcaaagct	420
gacttcccta	cacctagtat	atctgacttt	gaaattccac	cttctaacat	tagaaggata	480
atttgctcaa	cctccggagg	ttttcctgag	cctcacctct	cctggctgga	aaatggagaa	540
gaattaaatg	ccatcaacac	aacagtttcc	caagatcctg	aaactgagct	ctatactgtt	600
agcagcaaac	tggattttcaa	tatgacagcc	aatcacagtt	ttgtgtgtct	catcaagtat	660
ggacatttaa	gagtgaatca	gaccttcaac	tgggaatacac	ccaagcaaga	gcatttttcc	720
gataacctgc	tcccacctcg	ggccattacc	ttaatctcag	taaatggaat	ttttgtgata	780
tgctgcctga	cctactgctt	tgccccaaga	tgcagagaga	ggagaaggaa	tgagacactg	840
agaagggaaa	gtgtacgccc	tgtatga				867

<210> 27

<211> 865

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 27

atggggccaca	cacggaggga	gggaatatca	ccacccaagt	gtccatacct	caattttcttt	60
cagctcttgg	tgctggcttg	tctttctcat	ttctgttcag	gtgttatcca	cgtgactaag	120
gaagtgaag	aagtggcaac	actgtcctgt	ggtcacaatg	tttctgttga	agagctggca	180
caaactcgca	tccactggca	aaaggagaag	aaaatgggtgc	tgactatgat	gtccggggac	240
atgaatatat	ggcccagagta	caagaaccgg	accatctttg	atatcactaa	taacctctcc	300
attgtgattc	tggctctgcg	cccatctgac	gagggcacat	acgagtgtgt	tgttctgaag	360
tatgaaaaag	acgcttttcaa	gcgggaacac	ctggctgaag	tgatgttatc	cgtcaaagct	420
gacttcccta	cacctagtat	aactgacttt	gaaattccac	cttctaacat	tagaaggata	480
atttgctcaa	cctctggagg	ttttcctgag	cctcacctct	cctggctgga	aaatggagaa	540
gaattaaatg	ccatcaacac	aacagtttcc	caagatcctg	aaactgagct	ctatactgtt	600
agcagcaaac	tggattttcaa	tatgacagcc	aatcacagtt	ttgtgtgtct	catcaagtat	660
ggacatttaa	gagtgaatca	gaccttcaac	tgggaatacac	ccaagcaaga	gcatttttcc	720
gataacctgc	tcccacctcg	ggccattacc	ttaatctcag	taaatggaat	ttttgtgata	780
tgctgcctga	cctactgctt	tgccccaaga	tgcagagaga	gaaggaatga	gacactgaga	840
agggaaagtg	tacgcctgt	atgac				865

<210> 28

<211> 869

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 28

atgagccaca	cacggaggga	gggaatatca	ccatccaagt	gtccatacct	caagttcttt	60
cagctcttgg	tgctggcttg	tctttctcat	ttctgttcag	gtgttatcca	cgtgaccaag	120
gaagtgaag	aagtggcaac	actgtcctgt	ggtcacaatg	tttctgttga	agagctggca	180
caaactcgca	tccactggca	aaaggagaag	aaaatgggtgc	tgactatgat	gtctggggac	240
atgaatatat	ggcccagagta	caagaaccgg	accatctttg	atatcactaa	taacctctcc	300
attgtgattc	tggctctgcg	cccatctgac	gagggcacat	acgagtgtgt	tgttctgaag	360
tatgaaaaag	acgcttttcaa	gcgagaacac	ctggctgaag	tgatgttatc	cgtcaaagct	420
gacttcccta	cacctagtat	aactgacttt	gaaattccac	cttctaacat	tagaaggata	480
atttgctcaa	cctctggagg	ttttccagag	cctcacctct	tctggctgga	aaatggggaa	540

gaattaaatg	ccatcaacac	aacagtttcc	caagatcctg	aaactgagct	ctatactggt	600
agcagcaaac	tggatttcaa	tatgacaacc	gatcgagctt	ttgtgtgtct	catcaagtat	660
ggacatttaa	gagtgaatca	gaccttcaac	tggataacac	ccaagcaaga	gcattttcct	720
gataacctgc	tcccatcctg	ggccattacc	ttaatctcag	caaagtgaat	ttttgtgata	780
tgctgcctga	cctactgctt	tgccccaaga	tgcagagaga	gaaagagcaa	tgagacactg	840
agaaggga	gtgtacgcc	tgtatgaaa				869

<210> 29

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 29

atgagccaca	cacggaggca	gggaatatca	ccatccaagt	gtccgtacct	caagttcttt	60
cagctcttgg	tgctggctag	tctttctcat	ttctgttcag	gtgttatcca	cgtgaccaag	120
gaagtgaag	aagtggcaac	gctgtcctgt	ggtcacaatg	tttctgttga	agagctggca	180
caaactcgca	tccactggca	aaaggagaag	aaaatgggtgc	tgacctgat	gtctggggac	240
atgaatatat	ggcccgagta	caagaaccgg	accatctttg	atatcactaa	taacctctcc	300
attgtgattc	tggctctgcg	cccactctgac	gagggcacat	acgagtgtgt	tgttctgaag	360
tatgaaaaag	acgctttcaa	gcgagaacac	ctagctgaag	tgacgttatc	agtcaaagct	420
gacttccta	cacctagtat	aactgacttt	gaaattccac	cttctaakat	taaaaggata	480
atttgctcaa	cctccggagg	ttttcctgag	cctcacctct	cctggctgga	aaatggggaa	540
gaattaaatg	ccatcaacac	aacagtttcc	caagatcctg	aaactgagct	ctatactggt	600
agcagcaaac	tggatttcaa	tatgacaacc	aaccacagct	tcatgtgtct	catcaagtat	660
ggacatttaa	gagtgaatca	gaccttcaac	tggataacac	ccaagcaaga	gcattttcct	720
gataaccac	tcccatcctg	ggccattacc	ttaatctcag	caaagtgaat	ttttgtgata	780
tgctgcctga	cctactgctt	tgccccaaga	tgcagagaga	ggagaaggaa	tgagacactg	840
agaaggga	gtgtacgcc	tgtatga				867

<210> 30

<211> 868

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 30

atggggccaca	cacggaggca	gggaacatca	ccatccaagt	gtccgtacct	caagttcttt	60
cagctcttgg	tgctggcttg	tctttctcat	ttctgttcag	gtgttatcca	cgtgaccaag	120
gaagtgaag	aagtggcaac	actgtcctgt	ggtcacaatg	tttctgttga	agagctggca	180
caaactcgca	tccactggca	aaaggagaag	aaaatgggtgc	tgactatgat	gtctggggac	240
atgaatatat	ggcccgagta	caagaaccgg	accatctttg	atatcactaa	taacctctcc	300
attgtgattc	tggctctgcg	cccactctgac	gagggcacat	acgagtgtgt	tgttctgaag	360
tatgaaaaag	acgctttcaa	gcgggaacac	ctggctgaag	tgatgttatc	cgtcaaagct	420
gacttccta	cacctagtat	aactgacttt	gaaattccaa	cttctaakat	tagaaggata	480
atttgctcaa	cctccggagg	ttttcctgag	cctcacctct	cctggctgga	aaatggagaa	540
gaattaaatg	ccatcaacac	aacagtttcc	caagatcctg	aaactgagct	ctatactggt	600
agcagcaaac	tggatttcaa	tatgacaacc	aaccacagct	tcatgtgtct	catcaagtat	660
ggacatttaa	gagtgaatca	gaccttcaac	tggataacac	ccaagcaaga	gcattttcct	720

gataacctgc tcccatcctg ggccattacc ttaatctcag taaatggaat ttttgtgata 780
 tgctgcctga cctaccgctt tgccccaaga tgcagagaga gaaagagcaa tgagagactg 840
 agaagggaaa gtgtacgccc tgtatgac 868

<210> 31
 <211> 868
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 nucleotide sequence

<400> 31
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 cagctcttgg tgctggcttg tctttctcat ttctgttcag gtgttatcca cgtgaccagg 120
 gaagtgaag aagtggcaac actgtcctgt ggccacaatg tttctgttga agagctggca 180
 caaactcgca tccactggca aaaggagaag aaaatgggtgc tgactatgat gtctggggac 240
 atgaatatat ggcccagta caagaaccgg accatctttg atatcactaa taacctctcc 300
 attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgaag 360
 tatgaaaaag acgctttcaa gcgggaacac ctactgaag tgatgttatc cgtcaaagct 420
 gacttccta cactagtag atctgacttt gaaattccaa cttctaatat tagaaggata 480
 atttgctcaa cctctggagg ttttcctgag cctcacctct cctggctgga aaatggagaa 540
 gaattaaatg ccatcaaac aacagtttcc caagatcctg aaactgggct ctatactgtt 600
 agcagcaaac tggatttcaa tatgacaacc aaccacagct tcatgtgtct catcaagtat 660
 ggacatttaa gagtgaatca gaccttcaac tgggaatacac ccaagcaaga gcattttcct 720
 gataacctgc tcccatcctg ggccattacc ttaatctcag taaatggaat ttttgtgata 780
 tgctgcctga cctactgctt tgccccaaga tgcagagaga gaaggaggaa tgagagattg 840
 agaagggaaa gtgtatgccc tgtataag 868

<210> 32
 <211> 868
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 nucleotide sequence

<400> 32
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 cagctcttgg tgctggctag tctttctcat ttctgttcag gtgttatcca cgtgaccaag 120
 gaagtgaag aagtggcaac actgtcctgt ggtctcaatg tttctgttga agagctggca 180
 caaactcgca tctactggca aaaggagaag aaaatgggtgc tgactatgat gtctggggac 240
 atgaatatat ggcccagta caagaaccgg accatctttg atatcactaa taacctctcc 300
 attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctggag 360
 tatgaaaaag acgctttcaa gcgggaacac ctggctgaag tgatgttatc cgtcaaagct 420
 gacttccta cactagtag atctgacttt gaaattccac cttctaacat tagaaggata 480
 atttgctcaa cctctggagg ttttcctgag cctcacctct cctggctgga aaatggggaa 540
 gaattaaatg gcatcaaac aacagtttcc caagatcctg aaactgagct ctatactgtt 600
 agcagcaaac tggatttcaa tatgacaacc aatcgagtt ttgtgtgtct catcaagtat 660
 ggacatttaa gagtgaatca gaccttcaac tgggaatacac ccaagcaaga gcattttcct 720
 gataacctgc tcccatcctg ggccattacc ttaatctcag taaatggaat ttttgtgata 780
 tgctgcctga cctactgctt tgccccaaga tgcagagaga ggaggaggaa tgagagactg 840
 agaagggaaa gtgtacaccc tgtatgag 868

<210> 33
<211> 867
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 33
atgagccaca cacggaggca gggaatatca ccatccaagt gtccatacct caatttcttt 60
cggtctttgg tgctggctag tctttctcat ttctgttcag gtgttatcca cgtgaccaag 120
gaagtgaag aagtggcaac actgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaactcgca tccactggca aaaggagaag aaaatgggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagta caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgaag 360
tatgaaaaag acgctttcaa gcgagaacac ctactgaag tgacgttata agtcaaagct 420
ggcttccta cacctagtat aactgacttt gaaattccac cttctaacat tagaaggata 480
atttgcctca cctctggagg tttccagag cctcacctct cctggctgga aaatggagaa 540
gaattaaatg ccatcaacac aacagtttcc caagatcctg gaactgagct ctatactgtt 600
agcagcaaac tggatttcaa tatgacagcc aatcacagtt ttgtgtgtct catcaagtat 660
ggacatttaa gactgaatca gaccttcaac tgggaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccatcctg ggccattacc ttaatctcag caaatggaat ttttgtgata 780
tgctgcctga cctactgctt tgccccaaga tgcagagaga gaaggaggaa tgagagattg 840
agaagggaaa gtgtacgccc tgtatga 867

<210> 34
<211> 868
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 34
atgagccaca cacggaggca gggaacatca ccatccaagt gtccatacct caagttcttt 60
cagctcttgg tgctggctag tctttctcac ttctgttcag gtgttatcca catgaccaag 120
gaagtgaag aagtggcaac gctgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaactcgca tctactggca aaaggagaag aaaatgggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagta caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgaag 360
tatgaaaaag acgctttcaa gcaggaacac ctggctgaag tgatgttatc cgtcaaagct 420
gacttccta cacctagtat aactgacttt gaaattccac cttctaacat tagaaggata 480
atttgcctca cctctggagg tttccagag cctcacctct tctggctgga aaatggagag 540
gaattaaatg ccatcaacac aacagtttcc caagaccctg aaactgagct ctatgctgtt 600
agcagcaaac tggatttcaa tatgacaacc aaccacagtt ttgtgtgtct catcaagtat 660
ggacatttaa gactgaatca gaccttcaac tgggaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccatcctg ggccattacc ttaatctcag caaatggaat ttttgtgata 780
tgctgcctga cctactgctt tgccccaaga tgcagagaga gaaggaggaa tgagagattg 840
agaagggaaa gtgtacaccc tgtatga 868

<210> 35

<211> 868
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 35

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cagctcttgg tgctggcttg tctttctcat ttctgttcag gtgttatcca cgtgaccaag 120
gaagtgaaag aagtggcaac actgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaactcgca tctactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240
atgaatatat ggcccgagta caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctggag 360
tatgaaaaag acgctttcaa gcgggaacac ctggctgaag tgacgttatc agtcaaagct 420
gacttcctta cacctagtat atctgacttt gaaattccac cttctaacat tagaaggata 480
atttgctcaa cctctggagg ttttccagag cctcacctct tctggctgga aaatggagaa 540
gaattaaatg ccatcaacac aacagtttcc caagatcctg aaactgagct ctatgctgtt 600
agcagcaaac tggattttcaa tatgacaacc aaccacagct tcatgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tgggaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccatcctg ggccattacc ttaatctcag caaatggaat ttttgtgata 780
tgctgcctga cctactgctt tgccccaaga tgcagagaga gaaagagcaa tgagagactg 840
agaagggaaa gtgtacacc tgtatgat 868
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<210> 36
<211> 868
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 36

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atgagccaca cacggaggca ggggaatatca ccatccaagt gtccatacct caagttcttt 60
cagctcttgg tgctggcttg tctttctcat ttctgttcag gtgttatcca cgtgaccaag 120
gaagtgaaag aagtggcaac gctgtcctgt ggtcacaatg tttctgttga agagctagca 180
caaactcgca tctactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240
atgaatatat ggcccgagta caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg ctcatctgac gagggcacat acgagtgtgt tgttctgaag 360
tatgaaaaag acgctttcaa gcgggaacac ctagctgaag tgacgttatc agtcaaagct 420
gacttcctta cacctagtat aactgacttt gaaattccac cttctaacat tagaaggata 480
atttgctcaa cctctggagg ttttcttgag cctcacctct cctggctgga aaatggagaa 540
gaattaaatg ccatcagcac aacagtttcc caagatcctg aaactgagct ctacactgtt 600
agcagcaaac tggattttcaa tatgacaacc aatcgcagtt ttgtgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tgggaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccatcctg ggccattacc ctaatctcag taaatggaat ttttgtgata 780
tgctgcctga cctactgctt tgccccaaga tgcagagaga gaaggagcaa tgagagactg 840
agaagggaaa gtgtacgcc tgtatgaa 868
```

<210> 37
<211> 868
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 37

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atggggccaca cacggaggca ggggaatatca ccatccaagt gtccgtacct caatttcttt 60
cagctcttgg tgctagctgg tctttctcac ttctgttcag gtgttatcca cgtgaccaag 120
gaagtgaaag aagtggcaac actgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaactcgca tctactggca aaaggggaag aaaatggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagta caagaaccgg accatcttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctggag 360
tatgaaaaag acgctttcaa gcgagaacac ctggctgaag tgatgttatc cgtcaaagct 420
gacttccta cacctagtat atctgacttt gaaattccaa cttctaata tagaaggata 480
atttgcctca cctctggagg ttttcctgag cctcacctct cctggctgga aaatggagaa 540
gaattaaatg ccatcaacac aacagcttcc caagatcctg aaactgagct ctatactgtt 600
agcagcaaac tggatttcaa tatgacaacc aaccacagct tcatgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tgggaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccacctg ggccattacc ttaatctcag caaatggaat ttttgtgata 780
tgctgcctgg cctactgctt tgccccagga tgcagagaga gaaagagcaa tgagagactg 840
agaagggaaa gtgtacgccc tgtatgac 868
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<210> 38

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 38

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atggggccaca cacggaggca ggggaatatca ccatccaagt gtccatacct caagttcttt 60
cagctcttgg tgctggcttg tctttctcat ctctgttcag gtgttatcca cgtgaccaag 120
gaagtgaaag aagtggcaac actgtcctgt ggtctcaatg tttctgttga agagctggca 180
caaactcgca tccactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagta caagaaccgg accatcttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgaag 360
tatgataaag acgctttcaa gcgggaacac ctggctgaag tgacgttgc agtcaaagct 420
gacttccta cacctagtat atctgacttt gaaattccac cttctaacat tagaaggata 480
atttgcctca cctccggagg ttttcctgag cctcacctct cctggctgga aaatggagaa 540
gaattaaatg ccatcaacac aacagtttcc caagatcctg aaactgagct ctatactgtt 600
agcagcaaac tggatttcaa tatgacagcc aatcacagtt ttgtgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tgggaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccacctg ggccattacc ctaatctcag taaatggaat ttttgtgata 780
tgctgcctga cctaccgctt tgccccagga tgcagagaga gaaagagcaa tgagagactg 840
agaagggaaa gtgtacgccc tgtatga 867
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<210> 39

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

nucleotide sequence

<400> 39

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atggggccaca cacggaggca gggaacatca ccatccaagt gtccatacct caagttcttt 60
cagctcttgg tgctggctgg tctttctcac ttctgttcag gtgttatcca cgtgaccaag 120
gaagtgaag aagtggcaac gctgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaaactcgca tccactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagta caagaaccgg accatctttg atatcactaa taacctctcc 300
atcgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgaag 360
tatgaaaaag atgctttcaa gcgagaacac ctggctgaag tgatgttatc cgtcaaagct 420
gacttcccta cacctagtat atctgacttt gaaattccac cttctaaca tagaaggata 480
atttgctcaa cctctggagg ttttccagag cctcacctct tctggttgga aaatggggaa 540
gaattaaatg ccatcaacac aacagtttcc caagatcctg aaactgagct ctatactgtt 600
agcagcaaac tggatttcaa tatgacaacc aaccacagct tcatgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tggaaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccatcctg ggccattacc ttaatctcag caaatggaat ttttgtgata 780
tgctgcctga cctaccgctt tgccccaaga tgcagagaga gaaagagcaa tgagacactg 840
agaagggaaa gtgtacgcc tgtatga 867
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<210> 40

<211> 868

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 40

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atggggccaca cacggaggca gggaacatca ccatccaagt gtccgtacct caagttcttt 60
cagctcttgg tgatggcttg tctttctcat ttctgttcag gtgttatcca cgtgaccaag 120
gaagtgaag aagtggcaac actgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaaactcgca tccactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagta caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgaag 360
tatgaaaaag acgctttcaa gcgagaacac ctagtgaag tgatgttatc cgtcaaagct 420
gacttcccta cacctagtat atctgacttt gaaattccaa cttctaata tagaaggata 480
atttgctcaa cctctggagg ttttccagag cctcacctct tctggttgga aaatggggaa 540
gaattaaatg ccatcaacac aacagtttcc caagatcctg aaactgagct ctatactgtt 600
agcagcaaac tggatttcaa tatgacaacc aaccacagct tcatgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tggaaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccatcctg ggccattacc ctaatctcag taaatggaat ttttgtgata 780
tgctgcctga cctactgctt tgccccaaga tgcagagaga gaaggaggaa tgagagattg 840
agaagggaaa gtgtatgcc tgtatgag 868
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<210> 41

<211> 868

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 41


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atggggccaca cacggaggca gggaatatca ccatccaagt gtccatacct caagttcttt 60
cagctcttgg tgctagcttg tctttctcat ttctgttcag gtgttatcca cgtgaccaag 120
gaagtgaag aagtggcaac gctgtcctgt ggtctcaatg tttctgttga agagctggca 180
caaaactcgca tccactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagta caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgaag 360
tatgaaaaag acgctttcaa gcgagaacac ctggctgaag tgatgttatc cgtcaaagct 420
gacttcccta cacctagtat atctgacttt gaaattccac cttctaacat tagaaggata 480
atttgctcaa cctctggagg ttttctgag cctcacctct cctggctgga aaatggagaa 540
gaattaaatg ccatcaacac aacagtttcc caagatcctg aaactgagct ctatgctgtt 600
agcagcaaac tggatttcaa tatgacaacc aaccacagct tcatgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tggaaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccatcctg ggccattacc ttaatctcag taaatggaat ttttgtgata 780
tgctgcctga cctactgctt tgccccaaga tgcagagaga ggagaaggaa tgagagactg 840
agaagggaaa gtgtacgcc tgtatgac                                     868

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<210> 42

<211> 868

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 42

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atggggccaca cacggaggca gggaatatca ccatccaagt gtccatacct caagttcttt 60
cagctcttgg tgctggcttg tcttcctcat ctctgttcag gtgttatcca cgtgaccaag 120
gaagtgaag aagtggcaac actgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaaactcgca tccactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagta caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgaag 360
tatgaaaaag atgctttcaa gcgggaacac ctggctgaag tgatgttatc cgtcaaagct 420
gacttcccta cacctagtat aactgacttt gaaattccac cttctaacat tagaaggata 480
atttgctcaa cctctggagg ttttctgag cccacactct cctggctgga aaatggagaa 540
gaattaaatg ccatcagca aacagtttcc caagatcctg aaactgagct ctatactgtt 600
agcagcaaac tggatttcaa tatgacaacc aaccacagct tcatgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tggaaatacaa ccaagcaaga gcattttcct 720
gataacctgc tcccatcctg ggccattacc ttaatctcag caaatggaat ttttgtgata 780
tgctgcctga cccactgttt tgccccaaga tgcagagaga gaaagaggaa tgagagactg 840
agaagggaaa gtgtacgcc tgtatgac                                     868

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<210> 43

<211> 868

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 43

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atgagccaca cacggaggca gggaacatca ccatccaagt gtccatacct caagttcttt 60
cagctcctgg tgctggcttg tctttctcat ctctgttcag gtgttatcca cgtgaccaag 120
gaagtgaag aagtggcaac gctgtcctgt ggtcacaatg tttctgttga agagctggca 180

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caaactcgca	tccactggca	aaaggagaag	aaaatggtgc	tgactatgat	gtctggggac	240
atgaatatat	ggcccagta	caagaaccgg	accatctttg	atatcactaa	taacctctcc	300
attgtgattc	tggctctgcg	cccatctgac	gagggcacat	acgagtgtgt	tgttctgaag	360
tatgaaaaag	acgctttcaa	gcgagaacac	ctggctgaag	tgatgttatc	cgtcaaagct	420
gacttccta	cacctagtat	atctgacttt	gaaattccaa	cttctaakat	tagaaggata	480
atttgctcaa	cctctggagg	ttttccagag	cctcacctct	cctggctgga	aaatggagaa	540
gaattaaatg	ccatcaacac	aacagtttcc	caagatcctg	aaactgagct	ctatactgtt	600
agcagcaaac	tggatttcaa	tatgacagcc	aatcacagtt	ttgtgtgtct	catcaagtat	660
ggacatttaa	gagtgaatca	gaccttcaac	tggataacac	ccaagcaaga	gcattttcct	720
gataacctgc	tcccactcctg	ggccattacc	ttaatctcag	taaatggaat	ttttgtgata	780
tgctgcctga	cctactgctt	tgccccaaga	tgagagagaa	gaaggaggaa	tgagagattg	840
agaagggaag	gtgtacgccc	tgtatgat				868

<210> 44

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 44

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cagctcttgg	tgctggcttg	tctttctcat	ttctgttcag	gtgttatcca	cgtgaccaag	120
gaagtgaag	aagtggcaac	actgtcctgt	ggtcacaatg	tttctgttga	agagctggca	180
caaactcgca	tccactggca	aaaggagaag	aaaatggtgc	tgactatgat	gtctggggac	240
atgaatatat	ggcccagta	caagaaccgg	accatctttg	atatcactaa	taacctctcc	300
attgtgattc	tggctctgcg	cccatctgac	gagggcacat	acgagtgtgt	tgttctgaag	360
tatgaaaaag	acgctttcaa	gcggaacac	ctggctgaag	tgatgttatc	agtcaaagct	420
gacttccta	cacctagtat	aactgacttt	gaaattccac	cttctaakat	tagaaggata	480
atttgctcag	cctctggagg	ttttccagag	cctcacctct	tctggctgga	aaatggagaa	540
gaattaaatg	ccatcaacac	aacagtttcc	caagatcctg	aaactgagct	ctatgctgtt	600
agcagcaaac	tggatttcaa	tatgacaacc	aaccacagct	tcatgtgtct	catcaggtat	660
ggacatttaa	gagtgaatca	gaccttcaac	tggataacac	ccaagcaaga	gcattttcct	720
gataacctgc	tcccactcctg	ggccattacc	ctaactctcag	taaatggaat	ttttgtgata	780
tgctgcctga	cctactgctt	tgccccaaga	tgagagagaa	gaaagagcaa	tgagagactg	840
agaagggaag	gtgtacgccc	tgtatga				867

<210> 45

<211> 868

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 45

atggggccaca	cacggaggca	gggaatatca	ccatccaagt	gtccgtacct	caattttcttt	60
cagctcttgg	tgctggcttg	tctttctcat	ttctgttcag	gtgttatcca	cgtgaccaag	120
gaagtgaag	aagtggcaac	gctgtcctgt	ggtcacaatg	tttctgttga	agagctggca	180
caaactcgca	tccactggca	aaaggagaag	aaaatggtgc	tgactatgat	gtctggggac	240
atgaatatat	ggcccagta	caagaaccgg	accatctttg	atatcactaa	taacctctcc	300
attgtgattc	tggctctgcg	cccatctgac	gagggcacat	acgagtgtgt	tgttctgaag	360

tatgaaaaag	acgcttttcaa	gcgagaacac	ctggctgaag	tgatgtttatc	cgtcaaagct	420
gacttcccta	cacctagtat	aactgacttt	gaaattccac	cttctaacat	tagaaggata	480
atttgctcaa	cctccggagg	ttttccagag	cctcacctct	cctggctgga	aaatggagaa	540
gaattaaatg	ccatcaacac	aacagcttcc	caagatcctg	aaactgagct	ctatactgtt	600
agcagcaaac	tggaatttcaa	tatgacaacc	aaccacagct	tcatgtgtct	catcaagtat	660
ggacatttaa	gagtgaatca	gaccttcaac	tggaatacac	ccaagcaaga	gcattttcct	720
gataacctgc	tcccatcctg	ggccattacc	ttaatctcag	taaatggaat	ttttgtgata	780
tgctgcctga	cctactgctt	tgccccaaga	tgcagagaga	gaaagagcaa	tgagagactg	840
agaagggaaa	gtgtacgccc	tgtatgag				868

<210> 46
 <211> 867
 <212> DNA
 <213> Papio sp.

<400> 46						
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cagctcttgg	tgctggcttg	tctttctcat	ttctgttcag	gtgttatcca	cgtgaccaag	120
gaagtgaag	aagtggcaac	actgtcctgt	ggtcacaatg	tttctgttga	agagctggca	180
caaactcgca	tctactggca	aaaggagaag	aaaatggtgc	tgactatgat	gtctggggac	240
atgaatatat	ggcccagta	caagaaccgg	accatctttg	atatcactaa	taacctctcc	300
attgtgattc	tggtctcgcg	cccatctgac	gagggcacat	acgagtgtgt	tgttctgaag	360
tatgaaaaag	atgctttcaa	gcgagaacac	ctggctgaag	tgatgtttatc	cgtcaaagct	420
gacttcccta	cacctagtat	aactgacttt	gaaattccac	cttctaacat	tagaaggata	480
atttgctcaa	cctctggagg	ttttccagag	cctcacctct	tctggttgga	aaatggagaa	540
gaattaaatg	ccatcaacac	aacagtttcc	caagatcctg	gaactgagct	ctatactgtt	600
agcagcaaac	tggaatttcaa	tatgacaacc	aatcacagtt	ttgtgtgtct	catcaagtat	660
ggacatttaa	gagtgaatca	gaccttcaac	tggaatacac	ccaagcaaga	gcattttcct	720
gataacctgc	tcccatcctg	ggccattacc	ctaactctcag	taaatggaat	ttttgtgata	780
tgctgcctga	cctactgttt	tgccccaaga	tgcagagaga	gaagaaggaa	tgagacattg	840
agaagggaaa	gtgtacgccc	tgtatga				867

<210> 47
 <211> 867
 <212> DNA
 <213> Pongo pygmaeus

<400> 47						
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cagctcttgg	tgctggctag	tctttctcac	ttctgttcag	gtgttatcca	cgtgaccaag	120
gaagtgaag	aagtggcaac	gctgtcctgt	ggtcacaatg	tttctgttga	agagctggca	180
caaactcgca	tctactggca	aaaggagaag	aaaatggtgc	tgactatgat	gtctggggac	240
atgaatatat	ggcccagta	caagaaccgg	accatctttg	atatcactaa	taacctctcc	300
attgtgatcc	tggtctcgcg	cccatctgac	gagggcacat	atgagtgtgt	tgttctgaag	360
tatgaaaaag	acgcttttcaa	gcggaacac	ctggctgaag	tgacgtttatc	ggtcaaagct	420
gacttcccta	cacctagtat	atctgacttt	gaaattccaa	cttctaatat	tagaaggatg	480
atttgctcaa	cctctggagg	ttttccagag	cctcacctct	cctggttgga	aaatggagaa	540
gaattaaatg	ccatcagcac	aacagtttcc	caagatcctg	aaactgagct	ctatgctgtt	600
agcagcaaac	tggaatttcaa	tatgacaacc	aaccacagct	tcatgtgtct	catcaagtat	660
ggacatttaa	gagtgaatca	gaccttcaac	tggaatacac	ccaagcaaga	gcattttcct	720
gataacctgc	tcccatcctg	ggccattacc	ttaatctcag	taaatggaat	ttttgtgata	780
tgctgcctga	cctactgctt	tgccccaaga	tgcagagaga	gaaggagcaa	tgagagactg	840
agaagggaaa	gtgtacgccc	tgtatga				867

<210> 48
<211> 296
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 48

Met	Gly	His	Thr	Met	Lys	Trp	Gly	Ser	Leu	Pro	Pro	Lys	Arg	Pro	Cys	
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Leu	Trp	Leu	Ser	Gln	Leu	Leu	Val	Leu	Thr	Gly	Leu	Phe	Tyr	Phe	Cys	
			20					25					30			
Ser	Gly	Ile	Thr	Pro	Lys	Ser	Val	Thr	Lys	Arg	Val	Lys	Glu	Thr	Val	
		35					40					45				
Met	Leu	Ser	Cys	Asp	Tyr	Asn	Thr	Ser	Thr	Glu	Glu	Leu	Thr	Ser	Leu	
	50					55				60						
Arg	Ile	Tyr	Trp	Gln	Lys	Asp	Ser	Lys	Met	Val	Leu	Ala	Ile	Leu	Pro	
65					70				75						80	
Gly	Lys	Val	Gln	Val	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Thr	Asp	
			85						90					95		
Met	Asn	Asp	Asn	Pro	Arg	Ile	Val	Ile	Leu	Ala	Leu	Arg	Leu	Ser	Asp	
		100					105						110			
Ser	Gly	Thr	Tyr	Thr	Cys	Val	Ile	Gln	Lys	Pro	Val	Leu	Lys	Gly	Ala	
	115					120						125				
Tyr	Lys	Leu	Glu	His	Leu	Ala	Ser	Val	Arg	Leu	Met	Ile	Arg	Ala	Asp	
	130				135					140						
Phe	Pro	Val	Pro	Thr	Ile	Asn	Asp	Leu	Gly	Asn	Pro	Ser	Pro	Asn	Ile	
145				150					155					160		
Arg	Arg	Leu	Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Arg	Pro	His	Leu	
			165					170						175		
Tyr	Trp	Leu	Glu	Asn	Gly	Glu	Glu	Leu	Asn	Ala	Thr	Asn	Thr	Thr	Leu	
		180					185						190			
Ser	Gln	Asp	Pro	Glu	Thr	Lys	Leu	Tyr	Met	Ile	Ser	Ser	Glu	Leu	Asp	
	195						200					205				
Phe	Asn	Met	Thr	Ser	Asn	His	Ser	Phe	Leu	Cys	Leu	Val	Lys	Tyr	Gly	
	210				215						220					
Asp	Leu	Thr	Val	Ser	Gln	Thr	Phe	Tyr	Trp	Gln	Glu	Ser	Lys	Pro	Thr	
225				230					235					240		
Pro	Ser	Ala	Asn	Gln	His	Leu	Thr	Trp	Thr	Ile	Ile	Ile	Pro	Val	Ser	
			245					250						255		

Ala Phe Gly Ile Ser Val Ile Ile Ala Val Ile Leu Thr Cys Leu Thr
260 265 270

Cys Arg Asn Ala Ala Ile Arg Arg Gln Arg Arg Glu Asn Glu Val Glu
275 280 285

Met Gln Ser Cys Ser Gln Ser Pro
290 295

<210> 49
<211> 299
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
peptide

<400> 49
Met Gly His Thr Leu Arg Pro Gly Thr Pro Leu Pro Arg Cys Leu His
1 5 10 15

Leu Lys Leu Cys Leu Leu Leu Ala Leu Ala Gly Leu His Phe Ser Ser
20 25 30

Gly Ile Ser Gln Val Thr Lys Ser Val Lys Glu Met Ala Ala Leu Ser
35 40 45

Cys Asp Tyr Asn Ile Ser Ile Asp Glu Leu Ala Arg Met Arg Ile Tyr
50 55 60

Trp Gln Lys Asp Gln Gln Met Val Leu Ser Ile Ile Ser Gly Gln Val
65 70 75 80

Glu Val Trp Pro Glu Tyr Lys Asn Arg Thr Phe Pro Asp Ile Ile Asn
85 90 95

Asn Leu Ser Leu Met Ile Leu Ala Leu Arg Leu Ser Asp Lys Gly Thr
100 105 110

Tyr Thr Cys Val Val Gln Lys Asn Glu Asn Gly Ser Phe Arg Arg Glu
115 120 125

His Leu Thr Ser Val Thr Leu Ser Ile Arg Ala Asp Ser Pro Val Pro
130 135 140

Ser Ile Thr Asp Ile Gly His Pro Ala Pro Asn Val Lys Arg Ile Arg
145 150 155 160

Cys Ser Ala Ser Gly Gly Phe Pro Glu Pro Arg Leu Ala Trp Met Glu
165 170 175

Asp Gly Glu Glu Leu Asn Ala Val Asn Thr Thr Val Asp Gln Asp Leu
180 185 190

Asp Thr Glu Leu Tyr Ser Val Ser Ser Glu Leu Asp Phe Asn Val Thr
195 200 205

Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly Glu Leu Ser Val
210 215 220

Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu Pro Pro Ile Asp
225 230 235 240

Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly Ala Leu Val Leu
245 250 255

Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His Val Ala Arg Trp
260 265 270

Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr Glu Arg Leu Ser
275 280 285

Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
290 295

<210> 50

<211> 299

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 50

Met Gly His Thr Leu Arg Pro Gly Thr Pro Leu Pro Arg Cys Leu His
1 5 10 15

Leu Lys Leu Cys Leu Leu Leu Ala Leu Ala Gly Leu His Phe Ser Ser
20 25 30

Gly Ile Ser Gln Val Thr Lys Ser Val Lys Glu Met Ala Ala Leu Ser
35 40 45

Cys Asp Tyr Asn Ile Ser Ile Asp Glu Leu Ala Arg Met Arg Ile Tyr
50 55 60

Trp Gln Lys Asp Gln Gln Met Val Leu Ser Ile Ile Ser Gly Gln Val
65 70 75 80

Glu Val Trp Pro Glu Tyr Lys Asn Arg Thr Phe Pro Asp Ile Ile Asn
85 90 95

Asn Leu Ser Leu Met Ile Leu Ala Leu Arg Leu Ser Asp Lys Gly Thr
100 105 110

Tyr Thr Cys Val Val Gln Lys Asn Glu Asn Gly Ser Phe Arg Arg Glu
115 120 125

His Leu Thr Ser Val Thr Leu Ser Ile Arg Ala Asp Phe Pro Val Pro

130	135	140
Ser Ile Thr Asp Ile Gly His Pro Ala Pro Asn Val Lys Arg Ile Arg 145 150 155 160		
Cys Ser Ala Ser Gly Asp Phe Pro Glu Pro Arg Leu Ala Trp Met Glu 165 170 175		
Asp Gly Glu Glu Leu Asn Ala Val Asn Thr Thr Val Asp Gln Asp Leu 180 185 190		
Asp Thr Glu Leu Tyr Ser Val Ser Ser Glu Leu Asp Phe Asn Val Thr 195 200 205		
Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly Glu Leu Ser Val 210 215 220		
Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu Pro Pro Ile Asp 225 230 235 240		
Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly Ala Leu Val Leu 245 250 255		
Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His Val Ala Arg Trp 260 265 270		
Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr Glu Arg Leu Ser 275 280 285		
Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly 290 295		

<210> 51

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 51

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Ser Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
 20 25 30
 Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
 35 40 45
 Met Leu Ser Cys Asp Tyr Ser Thr Ser Thr Glu Glu Leu Thr Ser Leu
 50 55 60
 Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
 65 70 75 80
 Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
 85 90 95
 Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
 100 105 110
 Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
 115 120 125
 Tyr Lys Leu Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp
 130 135 140
 Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
 145 150 155 160
 Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
 165 170 175
 Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Val
 180 185 190
 Ser Gln Asp Pro Gly Thr Glu Leu Tyr Met Ile Ser Ser Glu Leu Asp
 195 200 205
 Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
 210 215 220
 Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
 225 230 235 240
 Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
 245 250 255
 Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
 260 265 270
 Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
 275 280 285
 Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<210> 53
 <211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 53

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Ser Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
100 105 110

Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
115 120 125

Tyr Lys Leu Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp
130 135 140

Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
145 150 155 160

Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
165 170 175

Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Leu
180 185 190

Ser Gln Asp Pro Glu Thr Lys Leu Tyr Met Ile Ser Ser Glu Leu Asp
195 200 205

Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
210 215 220

Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
225 230 235 240

Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
245 250 255

Ala Leu Val Leu Thr Ala Val Val Leu Tyr Arg Pro Ala Cys Arg His

260

265

270

Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
 275 280 285

Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<210> 54

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 54

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
 1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
 20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
 35 40 45

Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
 50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
 65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
 85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
 100 105 110

Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
 115 120 125

Tyr Lys Leu Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp
 130 135 140

Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
 145 150 155 160

Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
 165 170 175

Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Val
 180 185 190

Ser Gln Asp Pro Gly Thr Glu Leu Tyr Met Ile Ser Ser Glu Leu Asp
 195 200 205

Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
 210 215 220
 Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
 225 230 235 240
 Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
 245 250 255
 Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
 260 265 270
 Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
 275 280 285
 Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<210> 55
 <211> 303
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 55
 Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
 1 5 10 15
 Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
 20 25 30
 Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
 35 40 45
 Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
 50 55 60
 Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
 65 70 75 80
 Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
 85 90 95
 Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
 100 105 110
 Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
 115 120 125
 Tyr Lys Leu Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp
 130 135 140

Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
145 150 155 160

Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
165 170 175

Cys Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Val
180 185 190

Ser Gln Asp Pro Gly Thr Glu Leu Tyr Met Ile Ser Ser Glu Leu Asp
195 200 205

Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
210 215 220

Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
225 230 235 240

Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
245 250 255

Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
260 265 270

Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
275 280 285

Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
290 295 300

<210> 56

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 56

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Ser Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp

85

90

95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
 100 105 110

Lys Gly Thr Tyr Thr Cys Val Val Gln Lys Pro Val Leu Lys Gly Ala
 115 120 125

Tyr Lys Leu Glu His Leu Thr Ser Val Arg Leu Met Ile Arg Ala Asp
 130 135 140

Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
 145 150 155 160

Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
 165 170 175

Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Val
 180 185 190

Ser Gln Asp Pro Gly Thr Glu Leu Tyr Met Ile Ser Ser Glu Leu Asp
 195 200 205

Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
 210 215 220

Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
 225 230 235 240

Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
 245 250 255

Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
 260 265 270

Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
 275 280 285

Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<210> 57

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 57

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
 1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
 20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
 35 40 45
 Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
 50 55 60
 Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
 65 70 75 80
 Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
 85 90 95
 Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
 100 105 110
 Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
 115 120 125
 Tyr Lys Leu Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp
 130 135 140
 Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
 145 150 155 160
 Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
 165 170 175
 Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Val
 180 185 190
 Ser Gln Asp Pro Gly Thr Glu Leu Tyr Met Ile Ser Ser Glu Leu Asp
 195 200 205
 Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
 210 215 220
 Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
 225 230 235 240
 Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
 245 250 255
 Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
 260 265 270
 Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
 275 280 285
 Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<210> 58

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 58

Met	Gly	His	Thr	Met	Lys	Trp	Arg	Ser	Leu	Pro	Pro	Lys	Arg	Pro	Cys	
1				5					10					15		
Leu	Trp	Leu	Ser	Gln	Leu	Leu	Val	Leu	Thr	Gly	Leu	Phe	Tyr	Phe	Cys	
			20					25					30			
Ser	Gly	Ile	Thr	Pro	Lys	Ser	Val	Thr	Lys	Arg	Val	Lys	Glu	Thr	Val	
		35					40					45				
Met	Leu	Ser	Cys	Asp	Tyr	Asn	Thr	Ser	Thr	Glu	Glu	Leu	Thr	Ser	Leu	
	50					55					60					
Arg	Ile	Tyr	Trp	Gln	Lys	Asp	Ser	Lys	Met	Val	Leu	Ala	Ile	Leu	Pro	
65					70					75					80	
Gly	Lys	Val	Gln	Val	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Thr	Asp	
			85						90						95	
Met	Asn	Asp	Asn	Pro	Arg	Ile	Val	Ile	Leu	Ala	Leu	Arg	Leu	Ser	Asp	
		100						105					110			
Ser	Gly	Thr	Tyr	Thr	Cys	Val	Ile	Gln	Lys	Pro	Val	Leu	Lys	Gly	Ala	
		115				120						125				
Tyr	Lys	Leu	Glu	His	Leu	Ala	Ser	Val	Arg	Leu	Met	Ile	Arg	Ala	Asp	
	130					135					140					
Phe	Pro	Val	Pro	Thr	Ile	Asn	Asp	Leu	Gly	Asn	Pro	Ser	Pro	Asn	Ile	
145					150					155					160	
Arg	Arg	Leu	Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Arg	Pro	His	Leu	
			165						170					175		
Tyr	Trp	Leu	Glu	Asn	Gly	Glu	Glu	Leu	Asn	Ala	Thr	Asn	Thr	Thr	Val	
		180						185					190			
Ser	Gln	Asp	Pro	Gly	Thr	Glu	Leu	Tyr	Met	Ile	Ser	Ser	Glu	Leu	Asp	
		195					200					205				
Phe	Asn	Val	Thr	Asn	Asn	His	Ser	Ile	Val	Cys	Leu	Ile	Lys	Tyr	Gly	
	210					215					220					
Glu	Leu	Ser	Val	Ser	Gln	Ile	Phe	Pro	Trp	Ser	Lys	Pro	Lys	Gln	Glu	
225					230					235					240	
Pro	Pro	Ile	Asp	Gln	Leu	Pro	Phe	Trp	Val	Ile	Ile	Pro	Val	Ser	Gly	
			245						250					255		
Ala	Leu	Val	Leu	Thr	Ala	Val	Val	Leu	Tyr	Cys	Leu	Ala	Cys	Arg	His	
		260						265					270			

Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
275 280 285

Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
290 295 300

<210> 59

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 59

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
100 105 110

Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
115 120 125

Tyr Lys Leu Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp
130 135 140

Phe Pro Val Pro Ser Ile Thr Asp Ile Gly His Pro Ala Pro Asn Val
145 150 155 160

Lys Arg Ile Arg Cys Ser Ala Ser Gly Gly Phe Pro Glu Pro Arg Leu
165 170 175

Ala Trp Met Glu Asp Gly Glu Glu Leu Asn Ala Val Asn Thr Thr Val
180 185 190

Asp Gln Asp Leu Asp Thr Glu Leu Tyr Ser Val Ser Ser Glu Leu Asp
195 200 205

Ser Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly

210	215	220
Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu		
225	230	235 240
Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly		
	245	250 255
Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His		
	260	265 270
Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr		
	275	280 285
Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly		
290	295	300

<210> 60

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 60

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys		
1	5	10 15
Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys		
	20	25 30
Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val		
	35	40 45
Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu		
50	55	60
Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro		
65	70	75 80
Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp		
	85	90 95
Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp		
	100	105 110
Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala		
	115	120 125
Tyr Lys Leu Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp		
130	135	140
Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile		
145	150	155 160

Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
165 170 175

Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Val
180 185 190

Ser Gln Asp Pro Gly Thr Glu Leu Tyr Met Ile Ser Ser Glu Leu Asp
195 200 205

Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
210 215 220

Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
225 230 235 240

Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
245 250 255

Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
260 265 270

Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
275 280 285

Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
290 295 300

<210> 61

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 61

Met Gly His Thr Met Lys Trp Arg Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Ser Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
 100 105 110
 Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
 115 120 125
 Tyr Lys Leu Glu His Leu Thr Ser Val Arg Leu Met Ile Arg Ala Asp
 130 135 140
 Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
 145 150 155 160
 Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
 165 170 175
 Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Leu
 180 185 190
 Ser Gln Asp Pro Gly Thr Glu Leu Tyr Met Ile Ser Ser Glu Leu Asp
 195 200 205
 Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
 210 215 220
 Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
 225 230 235 240
 Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
 245 250 255
 Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
 260 265 270
 Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
 275 280 285
 Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<210> 62

<211> 302

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 62

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
 1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
 20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val

35	40	45
Met Leu Ser Cys Asp Tyr Asn Ala Ser Thr Glu Glu Leu Thr Ser Leu 50 55 60		
Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro 65 70 75 80		
Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp 85 90 95		
Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp 100 105 110		
Lys Gly Thr Tyr Thr Cys Val Val Gln Lys Asn Glu Asn Gly Ser Phe 115 120 125		
Arg Arg Glu His Leu Thr Ser Val Thr Leu Ser Ile Arg Ala Asp Phe 130 135 140		
Pro Val Pro Ser Ile Thr Asp Ile Gly His Pro Ala Pro Asn Val Lys 145 150 155 160		
Arg Ile Arg Cys Ser Ala Ser Gly Gly Phe Pro Glu Pro Arg Leu Ala 165 170 175		
Trp Met Glu Asp Gly Glu Glu Leu Asn Ala Val Asn Thr Thr Val Asp 180 185 190		
Gln Asp Leu Asp Thr Glu Leu Tyr Ser Val Ser Ser Glu Leu Asp Phe 195 200 205		
Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly Glu 210 215 220		
Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu Pro 225 230 235 240		
Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly Ala 245 250 255		
Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His Val 260 265 270		
Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr Glu 275 280 285		
Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly 290 295 300		

<210> 63
 <211> 303
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 63

Met	Gly	His	Thr	Met	Lys	Trp	Gly	Ser	Leu	Pro	Pro	Lys	Arg	Pro	Cys
1				5					10					15	
Leu	Trp	Leu	Ser	Gln	Leu	Leu	Val	Leu	Thr	Gly	Leu	Phe	Tyr	Phe	Cys
			20					25					30		
Ser	Gly	Ile	Thr	Pro	Lys	Ser	Val	Thr	Lys	Arg	Val	Lys	Glu	Thr	Val
		35					40					45			
Met	Leu	Ser	Cys	Asp	Tyr	Ser	Thr	Ser	Thr	Glu	Glu	Leu	Thr	Ser	Leu
	50					55					60				
Arg	Ile	Tyr	Trp	Gln	Lys	Asp	Ser	Lys	Met	Val	Leu	Ala	Ile	Leu	Pro
65					70					75					80
Gly	Lys	Val	Gln	Val	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Thr	Asp
			85						90					95	
Met	Asn	Asp	Asn	Pro	Arg	Ile	Val	Ile	Leu	Ala	Leu	Arg	Leu	Ser	Asp
			100					105					110		
Ser	Gly	Thr	Tyr	Thr	Cys	Val	Ile	Gln	Lys	Pro	Val	Leu	Lys	Gly	Ala
		115					120					125			
Tyr	Lys	Leu	Glu	His	Leu	Ala	Ser	Val	Arg	Leu	Met	Ile	Arg	Ala	Asp
	130					135					140				
Phe	Pro	Val	Pro	Thr	Ile	Asn	Asp	Leu	Gly	Asn	Pro	Ser	Pro	Asn	Ile
145					150					155					160
Arg	Arg	Leu	Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Arg	Pro	His	Leu
			165						170					175	
Tyr	Trp	Leu	Glu	Asn	Gly	Glu	Glu	Leu	Asn	Ala	Thr	Asn	Thr	Thr	Val
		180						185					190		
Ser	Gln	Asp	Pro	Gly	Thr	Glu	Leu	Tyr	Met	Ile	Ser	Ser	Glu	Leu	Asp
		195					200					205			
Phe	Asn	Val	Thr	Asn	Asn	His	Ser	Ile	Val	Cys	Leu	Ile	Lys	Tyr	Gly
	210					215					220				
Glu	Leu	Ser	Val	Ser	Gln	Ile	Phe	Pro	Trp	Ser	Lys	Pro	Lys	Gln	Glu
225					230					235					240
Pro	Pro	Ile	Asp	Gln	Leu	Pro	Phe	Trp	Val	Ile	Ile	Pro	Val	Ser	Gly
			245						250					255	
Ala	Leu	Val	Leu	Thr	Ala	Val	Val	Leu	Tyr	Cys	Leu	Ala	Cys	Arg	His
		260						265					270		
Val	Ala	Arg	Trp	Lys	Arg	Thr	Arg	Arg	Asn	Glu	Glu	Thr	Val	Gly	Thr
		275					280					285			

Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
290 295 300

<210> 64

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 64

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Ser Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
100 105 110

Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
115 120 125

Tyr Lys Leu Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp
130 135 140

Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
145 150 155 160

Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro Arg Leu
165 170 175

Ala Trp Met Glu Asp Gly Glu Glu Leu Asn Ala Val Asn Thr Thr Val
180 185 190

Asp Gln Asp Leu Asp Thr Glu Leu Tyr Ser Val Ser Ser Glu Leu Asp
195 200 205

Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
210 215 220

Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
 225 230 235 240
 Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
 245 250 255
 Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
 260 265 270
 Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
 275 280 285
 Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<210> 65
 <211> 300
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 65
 Met Gly His Thr Leu Arg Pro Gly Thr Pro Leu Pro Arg Cys Leu His
 1 5 10 15
 Leu Lys Leu Cys Leu Leu Leu Ala Leu Ala Gly Leu His Phe Ser Ser
 20 25 30
 Gly Ile Ser Gln Val Thr Lys Ser Val Lys Glu Met Ala Ala Leu Ser
 35 40 45
 Cys Asp Tyr Asn Ile Ser Ile Asp Glu Leu Ala Arg Met Arg Ile Tyr
 50 55 60
 Trp Gln Lys Asp Gln Gln Met Val Leu Ser Ile Ile Ser Gly Gln Val
 65 70 75 80
 Glu Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp Met Asn Asp
 85 90 95
 Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp Ser Gly Thr
 100 105 110
 Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala Tyr Lys Leu
 115 120 125
 Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp Phe Pro Val
 130 135 140
 Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile Arg Arg Leu
 145 150 155 160
 Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu Tyr Trp Leu

Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
115 120 125

Tyr Lys Leu Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp
130 135 140

Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
145 150 155 160

Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
165 170 175

Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Val
180 185 190

Ser Gln Asp Pro Gly Thr Glu Leu Tyr Met Ile Ser Ser Glu Leu Asp
195 200 205

Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
210 215 220

Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
225 230 235 240

Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
245 250 255

Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
260 265 270

Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
275 280 285

Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
290 295 300

<210> 67

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 67

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
 50 55 60
 Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
 65 70 75 80
 Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
 85 90 95
 Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
 100 105 110
 Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
 115 120 125
 Tyr Lys Leu Glu His Leu Thr Ser Val Arg Leu Met Ile Arg Ala Asp
 130 135 140
 Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
 145 150 155 160
 Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
 165 170 175
 Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Val
 180 185 190
 Ser Gln Asp Pro Gly Thr Glu Leu Tyr Met Ile Ser Ser Glu Leu Asp
 195 200 205
 Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
 210 215 220
 Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
 225 230 235 240
 Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
 245 250 255
 Ala Leu Val Leu Ala Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
 260 265 270
 Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
 275 280 285
 Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<210> 68

<211> 302

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 68

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Ser Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Phe Pro Asp
85 90 95

Ile Ile Asn Asn Leu Ser Leu Met Ile Leu Ala Leu Arg Leu Ser Asp
100 105 110

Lys Gly Thr Tyr Thr Cys Val Val Gln Lys Asn Glu Asn Gly Ser Phe
115 120 125

Arg Arg Glu His Leu Thr Ser Val Thr Leu Ser Ile Arg Ala Asp Phe
130 135 140

Pro Val Pro Ser Ile Thr Asp Ile Gly His Pro Ala Pro Asn Val Lys
145 150 155 160

Arg Ile Arg Cys Ser Ala Ser Gly Asp Phe Pro Glu Pro Arg Leu Ala
165 170 175

Trp Met Glu Asp Gly Glu Glu Leu Asn Ala Val Asn Thr Thr Val Asp
180 185 190

Gln Asp Leu Asp Thr Glu Leu Tyr Ser Val Ser Ser Glu Leu Asp Phe
195 200 205

Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly Glu
210 215 220

Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu Pro
225 230 235 240

Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly Ala
245 250 255

Leu Val Leu Thr Val Val Val Leu Tyr Cys Leu Ala Cys Arg His Val
260 265 270

Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr Glu
275 280 285

Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly

290

295

300

<210> 69

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 69

Met	Gly	His	Thr	Arg	Arg	Gln	Gly	Ile	Ser	Pro	Ser	Lys	Cys	Pro	Tyr
1				5					10					15	

Leu	Lys	Phe	Phe	Gln	Leu	Leu	Val	Leu	Ala	Gly	Leu	Ser	His	Phe	Cys
			20					25					30		

Ser	Gly	Val	Ile	His	Val	Thr	Lys	Glu	Val	Lys	Glu	Val	Ala	Thr	Leu
	35						40					45			

Ser	Cys	Gly	His	Asn	Val	Ser	Val	Glu	Glu	Leu	Ala	Gln	Thr	Arg	Ile
	50					55					60				

His	Trp	Gln	Lys	Glu	Lys	Lys	Met	Val	Leu	Thr	Met	Met	Ser	Gly	Asp
65					70					75					80

Met	Asn	Ile	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Phe	Asp	Ile	Thr
				85					90					95	

Asn	Asn	Leu	Ser	Ile	Val	Ile	Leu	Ala	Leu	Arg	Pro	Ser	Asp	Glu	Gly
		100						105					110		

Thr	Tyr	Glu	Cys	Val	Val	Leu	Lys	Tyr	Glu	Lys	Asp	Ala	Phe	Lys	Arg
		115					120					125			

Glu	His	Leu	Ala	Glu	Val	Thr	Leu	Ser	Val	Lys	Ala	Asp	Phe	Pro	Thr
	130					135					140				

Pro	Ser	Ile	Ser	Asp	Phe	Glu	Ile	Pro	Pro	Ser	Asn	Ile	Arg	Arg	Ile
145					150					155					160

Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Glu	Pro	His	Leu	Ser	Trp	Leu
				165					170					175	

Glu	Asn	Gly	Glu	Glu	Leu	Asn	Ala	Ile	Asn	Thr	Thr	Val	Ser	Gln	Asp
		180						185						190	

Pro	Gly	Thr	Glu	Leu	Tyr	Thr	Val	Ser	Ser	Lys	Leu	Asp	Phe	Asn	Met
		195					200					205			

Thr	Thr	Asn	His	Ser	Phe	Met	Cys	Leu	Ile	Lys	Tyr	Gly	His	Leu	Arg
	210					215					220				

Val	Asn	Gln	Thr	Phe	Asn	Trp	Asn	Thr	Pro	Lys	Gln	Glu	His	Phe	Pro
225					230					235					240

Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly
245 250 255

Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg
260 265 270

Glu Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val Arg Pro Val
275 280 285

<210> 70

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 70

Met Gly Tyr Thr Arg Arg Gln Gly Thr Ser Pro Ser Lys Cys Pro Tyr
1 5 10 15

Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Gly Leu Ser His Leu Cys
20 25 30

Ser Gly Val Ile His Val Thr Asn Glu Val Lys Glu Val Ala Thr Leu
35 40 45

Ser Cys Gly His Asn Val Ser Gly Glu Glu Leu Ala Gln Thr Arg Ile
50 55 60

Tyr Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Tyr Gly Asp
65 70 75 80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
85 90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
100 105 110

Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
115 120 125

Glu His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr
130 135 140

Pro Ser Ile Thr Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
145 150 155 160

Ile Cys Leu Thr Ser Gly Gly Phe Pro Glu Pro Arg Leu Ala Trp Met
165 170 175

Lys Asp Gly Glu Glu Leu Asn Ala Ile Ser Thr Thr Val Ser Gln Asp
 180 185 190
 Pro Gly Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met
 195 200 205
 Thr Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg
 210 215 220
 Val Asn Gln Thr Phe Ser Trp Asn Thr Pro Lys Gln Glu His Phe Pro
 225 230 235 240
 Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly
 245 250 255
 Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg
 260 265 270
 Glu Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val Arg Pro Val
 275 280 285

<210> 71
 <211> 288
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 71
 Met Ser His Thr Arg Arg Gln Gly Thr Ser Pro Ser Lys Cys Pro Tyr
 1 5 10 15
 Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Ser Leu Ser His Phe Cys
 20 25 30
 Ser Gly Val Ile His Met Thr Lys Glu Val Lys Glu Val Ala Thr Leu
 35 40 45
 Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
 50 55 60
 Tyr Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
 65 70 75 80
 Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
 85 90 95
 Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
 100 105 110
 Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg

115	120	125
Glu His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr 130	135	140
Pro Ser Ile Thr Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile 145	150	155 160
Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Phe Trp Leu 165	170	175
Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp 180	185	190
Pro Glu Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met 195	200	205
Thr Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg 210	215	220
Val Asn Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro 225	230	235 240
Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly 245	250	255
Ile Phe Val Ile Cys Cys Leu Thr His Cys Phe Ala Pro Arg Cys Arg 260	265	270
Glu Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val His Pro Val 275	280	285

<210> 72

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 72

Met Gly His Thr Arg Arg Gln Gly Ile Ser Pro Ser Lys Cys Pro Tyr
1 5 10 15

Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Cys Leu Ser His Phe Cys
20 25 30

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
35 40 45

Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
50 55 60

Tyr	Trp	Gln	Lys	Glu	Lys	Lys	Met	Val	Leu	Thr	Met	Met	Ser	Gly	Asp	
65					70					75					80	
Met	Asn	Ile	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Phe	Asp	Ile	Thr	
			85						90					95		
Asn	Asn	Leu	Ser	Ile	Val	Ile	Leu	Ala	Leu	Arg	Pro	Ser	Asp	Glu	Gly	
		100						105					110			
Thr	Tyr	Glu	Cys	Val	Val	Leu	Lys	Tyr	Glu	Lys	Asp	Ala	Phe	Lys	Arg	
		115					120					125				
Glu	His	Leu	Ala	Glu	Val	Thr	Leu	Ser	Val	Lys	Ala	Asp	Phe	Pro	Thr	
	130					135						140				
Pro	Ser	Ile	Ser	Asp	Phe	Glu	Ile	Pro	Thr	Ser	Asn	Ile	Arg	Arg	Ile	
145					150					155					160	
Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Glu	Pro	His	Leu	Phe	Gly	Leu	
			165						170					175		
Glu	Asn	Gly	Glu	Glu	Ile	Asn	Ala	Ile	Asn	Thr	Thr	Ala	Ser	Gln	Asp	
		180						185						190		
Pro	Glu	Thr	Glu	Leu	Tyr	Thr	Val	Ser	Ser	Lys	Leu	Asp	Phe	Asn	Met	
		195					200					205				
Thr	Pro	Asn	Arg	Ser	Phe	Val	Cys	Leu	Ile	Lys	Tyr	Gly	His	Leu	Arg	
	210					215					220					
Val	Asn	Gln	Thr	Phe	Asn	Trp	Asn	Thr	Pro	Lys	Gln	Glu	His	Phe	Pro	
225					230					235					240	
Asp	Asn	Leu	Leu	Pro	Ser	Trp	Ala	Ile	Thr	Leu	Ile	Ser	Ala	Asn	Gly	
			245						250					255		
Ile	Phe	Val	Ile	Cys	Cys	Leu	Thr	Tyr	Cys	Phe	Ala	Pro	Arg	Cys	Arg	
		260						265					270			
Glu	Arg	Lys	Ser	Asn	Glu	Arg	Leu	Arg	Arg	Glu	Ser	Val	Arg	Pro	Val	
	275						280					285				

<210> 73

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 73

Met	Ser	His	Thr	Arg	Arg	Gln	Gly	Ile	Ser	Pro	Ser	Lys	Cys	Pro	Tyr	1	5	10	15
Leu	Asn	Phe	Phe	Gln	Leu	Leu	Val	Leu	Ala	Ser	Leu	Ser	His	Phe	Cys	20	25	30	
Ser	Gly	Val	Ile	His	Val	Thr	Lys	Glu	Val	Lys	Glu	Val	Ala	Thr	Leu	35	40	45	
Ser	Cys	Gly	Leu	Asn	Val	Ser	Val	Glu	Glu	Leu	Ala	Gln	Thr	Arg	Ile	50	55	60	
Tyr	Trp	Gln	Lys	Glu	Lys	Lys	Met	Val	Leu	Thr	Met	Met	Ser	Gly	Asp	65	70	75	80
Met	Asn	Ile	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Phe	Asp	Ile	Thr	85	90	95	
Asn	Asn	Leu	Ser	Ile	Val	Ile	Leu	Ala	Leu	Arg	Pro	Ser	Asp	Glu	Gly	100	105	110	
Thr	Tyr	Glu	Cys	Val	Val	Leu	Lys	Tyr	Glu	Lys	Asp	Ala	Phe	Lys	Arg	115	120	125	
Glu	His	Leu	Ala	Glu	Val	Met	Leu	Ser	Val	Lys	Ala	Asp	Phe	Pro	Thr	130	135	140	
Pro	Ser	Ile	Ser	Asp	Phe	Glu	Ile	Pro	Pro	Ser	Asn	Ile	Arg	Arg	Ile	145	150	155	160
Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Glu	Pro	His	Leu	Ser	Trp	Leu	165	170	175	
Glu	Asn	Gly	Glu	Glu	Leu	Asn	Ala	Ile	Asn	Thr	Thr	Val	Ser	Gln	Asp	180	185	190	
Pro	Glu	Thr	Glu	Leu	Tyr	Thr	Val	Ser	Ser	Lys	Leu	Asp	Phe	Asn	Met	195	200	205	
Thr	Ala	Asn	His	Ser	Phe	Val	Cys	Leu	Ile	Lys	Tyr	Gly	His	Leu	Arg	210	215	220	
Val	Asn	Gln	Thr	Phe	Asn	Trp	Asn	Thr	Pro	Lys	Gln	Glu	His	Phe	Pro	225	230	235	240
Asp	Asn	Leu	Leu	Pro	Ser	Trp	Ala	Ile	Thr	Leu	Ile	Ser	Val	Asn	Gly	245	250	255	
Ile	Phe	Val	Ile	Cys	Cys	Leu	Thr	Tyr	Cys	Phe	Ala	Pro	Arg	Cys	Arg	260	265	270	
Glu	Arg	Arg	Arg	Asn	Glu	Thr	Leu	Arg	Arg	Glu	Ser	Val	Arg	Pro	Val	275	280	285	

<210> 74
<211> 287
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
peptide

<400> 74

Met	Gly	His	Thr	Arg	Arg	Gln	Gly	Ile	Ser	Pro	Pro	Lys	Cys	Pro	Tyr	
1				5					10					15		
Leu	Asn	Phe	Phe	Gln	Leu	Leu	Val	Leu	Ala	Cys	Leu	Ser	His	Phe	Cys	
			20					25					30			
Ser	Gly	Val	Ile	His	Val	Thr	Lys	Glu	Val	Lys	Glu	Val	Ala	Thr	Leu	
		35					40					45				
Ser	Cys	Gly	His	Asn	Val	Ser	Val	Glu	Glu	Leu	Ala	Gln	Thr	Arg	Ile	
	50					55					60					
His	Trp	Gln	Lys	Glu	Lys	Lys	Met	Val	Leu	Thr	Met	Met	Ser	Gly	Asp	
65					70					75					80	
Met	Asn	Ile	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Phe	Asp	Ile	Thr	
				85					90					95		
Asn	Asn	Leu	Ser	Ile	Val	Ile	Leu	Ala	Leu	Arg	Pro	Ser	Asp	Glu	Gly	
			100					105						110		
Thr	Tyr	Glu	Cys	Val	Val	Leu	Lys	Tyr	Glu	Lys	Asp	Ala	Phe	Lys	Arg	
		115					120					125				
Glu	His	Leu	Ala	Glu	Val	Met	Leu	Ser	Val	Lys	Ala	Asp	Phe	Pro	Thr	
		130				135					140					
Pro	Ser	Ile	Thr	Asp	Phe	Glu	Ile	Pro	Pro	Ser	Asn	Ile	Arg	Arg	Ile	
145					150					155					160	
Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Glu	Pro	His	Leu	Ser	Trp	Leu	
				165					170					175		
Glu	Asn	Gly	Glu	Glu	Leu	Asn	Ala	Ile	Asn	Thr	Thr	Val	Ser	Gln	Asp	
			180					185					190			
Pro	Glu	Thr	Glu	Leu	Tyr	Thr	Val	Ser	Ser	Lys	Leu	Asp	Phe	Asn	Met	
		195					200					205				
Thr	Ala	Asn	His	Ser	Phe	Val	Cys	Leu	Ile	Lys	Tyr	Gly	His	Leu	Arg	
		210					215				220					
Val	Asn	Gln	Thr	Phe	Asn	Trp	Asn	Thr	Pro	Lys	Gln	Glu	His	Phe	Pro	
225					230					235					240	
Asp	Asn	Leu	Leu	Pro	Ser	Trp	Ala	Ile	Thr	Leu	Ile	Ser	Val	Asn	Gly	

245

250

255

Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg
 260 265 270

Glu Arg Arg Asn Glu Thr Leu Arg Arg Glu Ser Val Arg Pro Val
 275 280 285

<210> 75

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 75

Met Ser His Thr Arg Arg Gln Gly Ile Ser Pro Ser Lys Cys Pro Tyr
 1 5 10 15

Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Cys Leu Ser His Phe Cys
 20 25 30

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
 35 40 45

Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
 50 55 60

His Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
 65 70 75 80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
 85 90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
 100 105 110

Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
 115 120 125

Glu His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr
 130 135 140

Pro Ser Ile Thr Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
 145 150 155 160

Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Phe Trp Leu
 165 170 175

Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp
 180 185 190

Pro Glu Thr Glu Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met
 195 200 205

Thr	Thr	Asp	Arg	Ser	Phe	Val	Cys	Leu	Ile	Lys	Tyr	Gly	His	Leu	Arg
210						215					220				
Val	Asn	Gln	Thr	Phe	Asn	Trp	Asn	Thr	Pro	Lys	Gln	Glu	His	Phe	Pro
225					230					235					240
Asp	Asn	Leu	Leu	Pro	Ser	Trp	Ala	Ile	Thr	Leu	Ile	Ser	Ala	Asn	Gly
				245					250					255	
Ile	Phe	Val	Ile	Cys	Cys	Leu	Thr	Tyr	Cys	Phe	Ala	Pro	Arg	Cys	Arg
		260						265					270		
Glu	Arg	Lys	Ser	Asn	Glu	Thr	Leu	Arg	Arg	Glu	Ser	Val	Arg	Pro	Val
	275						280					285			

<210> 76
 <211> 288
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 76

Met	Ser	His	Thr	Arg	Arg	Gln	Gly	Ile	Ser	Pro	Ser	Lys	Cys	Pro	Tyr
1				5					10					15	
Leu	Lys	Phe	Phe	Gln	Leu	Leu	Val	Leu	Ala	Ser	Leu	Ser	His	Phe	Cys
			20					25						30	
Ser	Gly	Val	Ile	His	Val	Thr	Lys	Glu	Val	Lys	Glu	Val	Ala	Thr	Leu
		35					40					45			
Ser	Cys	Gly	His	Asn	Val	Ser	Val	Glu	Glu	Leu	Ala	Gln	Thr	Arg	Ile
	50					55					60				
His	Trp	Gln	Lys	Glu	Lys	Lys	Met	Val	Leu	Thr	Met	Met	Ser	Gly	Asp
65					70					75					80
Met	Asn	Ile	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Phe	Asp	Ile	Thr
				85					90					95	
Asn	Asn	Leu	Ser	Ile	Val	Ile	Leu	Ala	Leu	Arg	Pro	Ser	Asp	Glu	Gly
		100						105					110		
Thr	Tyr	Glu	Cys	Val	Val	Leu	Lys	Tyr	Glu	Lys	Asp	Ala	Phe	Lys	Arg
		115					120					125			
Glu	His	Leu	Ala	Glu	Val	Thr	Leu	Ser	Val	Lys	Ala	Asp	Phe	Pro	Thr
	130						135					140			

Pro Ser Ile Thr Asp Phe Glu Ile Pro Pro Ser Asn Ile Lys Arg Ile
 145 150 155 160
 Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu
 165 170 175
 Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp
 180 185 190
 Pro Glu Thr Glu Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met
 195 200 205
 Thr Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg
 210 215 220
 Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
 225 230 235 240
 Asp Asn Pro Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Ala Asn Gly
 245 250 255
 Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg
 260 265 270
 Glu Arg Arg Arg Asn Glu Thr Leu Arg Arg Glu Ser Val Arg Pro Val
 275 280 285

<210> 77

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 77

Met Gly His Thr Arg Arg Gln Gly Thr Ser Pro Ser Lys Cys Pro Tyr
 1 5 10 15
 Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Cys Leu Ser His Phe Cys
 20 25 30
 Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
 35 40 45
 Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
 50 55 60
 His Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
 65 70 75 80
 Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
 85 90 95
 Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly

100					105					110						
Thr	Tyr	Glu	Cys	Val	Val	Leu	Lys	Tyr	Glu	Lys	Asp	Ala	Phe	Lys	Arg	
115					120					125						
Glu	His	Leu	Ala	Glu	Val	Met	Leu	Ser	Val	Lys	Ala	Asp	Phe	Pro	Thr	
130					135					140						
Pro	Ser	Ile	Thr	Asp	Phe	Glu	Ile	Pro	Thr	Ser	Asn	Ile	Arg	Arg	Ile	
145					150					155					160	
Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Glu	Pro	His	Leu	Ser	Trp	Leu	
165					170					175						
Glu	Asn	Gly	Glu	Glu	Leu	Asn	Ala	Ile	Asn	Thr	Thr	Val	Ser	Gln	Asp	
180					185					190						
Pro	Glu	Thr	Glu	Leu	Tyr	Thr	Val	Ser	Ser	Lys	Leu	Asp	Phe	Asn	Met	
195					200					205						
Thr	Thr	Asn	His	Ser	Phe	Met	Cys	Leu	Ile	Lys	Tyr	Gly	His	Leu	Arg	
210					215					220						
Val	Asn	Gln	Thr	Phe	Asn	Trp	Asn	Thr	Pro	Lys	Gln	Glu	His	Phe	Pro	
225					230					235					240	
Asp	Asn	Leu	Leu	Pro	Ser	Trp	Ala	Ile	Thr	Leu	Ile	Ser	Val	Asn	Gly	
245					250					255						
Ile	Phe	Val	Ile	Cys	Cys	Leu	Thr	Tyr	Arg	Phe	Ala	Pro	Arg	Cys	Arg	
260					265					270						
Glu	Arg	Lys	Ser	Asn	Glu	Arg	Leu	Arg	Arg	Glu	Ser	Val	Arg	Pro	Val	
275					280					285						

<210> 78

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 78

Met	Gly	Tyr	Thr	Arg	Arg	Gln	Gly	Thr	Ser	Pro	Ser	Lys	Cys	Pro	Tyr
1					5				10					15	

Leu	Lys	Phe	Phe	Gln	Leu	Leu	Val	Leu	Ala	Cys	Leu	Ser	His	Phe	Cys
			20					25					30		

Ser	Gly	Val	Ile	His	Val	Thr	Arg	Glu	Val	Lys	Glu	Val	Ala	Thr	Leu
		35					40					45			

Ser	Cys	Gly	His	Asn	Val	Ser	Val	Glu	Glu	Leu	Ala	Gln	Thr	Arg	Ile
	50					55					60				

His	Trp	Gln	Lys	Glu	Lys	Lys	Met	Val	Leu	Thr	Met	Met	Ser	Gly	Asp	
65					70					75					80	
Met	Asn	Ile	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Phe	Asp	Ile	Thr	
				85					90					95		
Asn	Asn	Leu	Ser	Ile	Val	Ile	Leu	Ala	Leu	Arg	Pro	Ser	Asp	Glu	Gly	
		100						105					110			
Thr	Tyr	Glu	Cys	Val	Val	Leu	Lys	Tyr	Glu	Lys	Asp	Ala	Phe	Lys	Arg	
		115					120					125				
Glu	His	Leu	Ala	Glu	Val	Met	Leu	Ser	Val	Lys	Ala	Asp	Phe	Pro	Thr	
	130					135					140					
Pro	Ser	Ile	Ser	Asp	Phe	Glu	Ile	Pro	Thr	Ser	Asn	Ile	Arg	Arg	Ile	
145				150						155					160	
Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Glu	Pro	His	Leu	Ser	Trp	Leu	
				165					170					175		
Glu	Asn	Gly	Glu	Glu	Leu	Asn	Ala	Ile	Asn	Thr	Thr	Val	Ser	Gln	Asp	
		180					185							190		
Pro	Glu	Thr	Gly	Leu	Tyr	Thr	Val	Ser	Ser	Lys	Leu	Asp	Phe	Asn	Met	
		195					200					205				
Thr	Thr	Asn	His	Ser	Phe	Met	Cys	Leu	Ile	Lys	Tyr	Gly	His	Leu	Arg	
	210					215					220					
Val	Asn	Gln	Thr	Phe	Asn	Trp	Asn	Thr	Pro	Lys	Gln	Glu	His	Phe	Pro	
225					230					235					240	
Asp	Asn	Leu	Leu	Pro	Ser	Trp	Ala	Ile	Thr	Leu	Ile	Ser	Val	Asn	Gly	
				245					250					255		
Ile	Phe	Val	Ile	Cys	Cys	Leu	Thr	Tyr	Cys	Phe	Ala	Pro	Arg	Cys	Arg	
		260						265					270			
Glu	Arg	Arg	Arg	Asn	Glu	Arg	Leu	Arg	Arg	Glu	Ser	Val	Cys	Pro	Val	
	275						280					285				

<210> 79

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 79

Met	Ser	His	Thr	Arg	Arg	Gln	Gly	Thr	Ser	Pro	Ser	Lys	Cys	Pro	Tyr	
1				5					10					15		

Leu	Lys	Phe	Phe	Gln	Leu	Leu	Val	Leu	Ala	Ser	Leu	Ser	His	Phe	Cys	20	25	30
Ser	Gly	Val	Ile	His	Val	Thr	Lys	Glu	Val	Lys	Glu	Val	Ala	Thr	Leu	35	40	45
Ser	Cys	Gly	Leu	Asn	Val	Ser	Val	Glu	Glu	Leu	Ala	Gln	Thr	Arg	Ile	50	55	60
Tyr	Trp	Gln	Lys	Glu	Lys	Lys	Met	Val	Leu	Thr	Met	Met	Ser	Gly	Asp	65	70	75
Met	Asn	Ile	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Phe	Asp	Ile	Thr	85	90	95
Asn	Asn	Leu	Ser	Ile	Val	Ile	Leu	Ala	Leu	Arg	Pro	Ser	Asp	Glu	Gly	100	105	110
Thr	Tyr	Glu	Cys	Val	Val	Leu	Glu	Tyr	Glu	Lys	Asp	Ala	Phe	Lys	Arg	115	120	125
Glu	His	Leu	Ala	Glu	Val	Met	Leu	Ser	Val	Lys	Ala	Asp	Phe	Pro	Thr	130	135	140
Pro	Ser	Ile	Ser	Asp	Phe	Glu	Ile	Pro	Pro	Ser	Asn	Ile	Arg	Arg	Ile	145	150	155
Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Glu	Pro	His	Leu	Ser	Trp	Leu	165	170	175
Glu	Asn	Gly	Glu	Glu	Leu	Asn	Gly	Ile	Asn	Thr	Thr	Val	Ser	Gln	Asp	180	185	190
Pro	Glu	Thr	Glu	Leu	Tyr	Thr	Val	Ser	Ser	Lys	Leu	Asp	Phe	Asn	Met	195	200	205
Thr	Thr	Asn	Arg	Ser	Phe	Val	Cys	Leu	Ile	Lys	Tyr	Gly	His	Leu	Arg	210	215	220
Val	Asn	Gln	Thr	Phe	Asn	Trp	Asn	Thr	Pro	Lys	Gln	Glu	His	Phe	Pro	225	230	235
Asp	Asn	Leu	Leu	Pro	Ser	Trp	Ala	Ile	Thr	Leu	Ile	Ser	Val	Asn	Gly	245	250	255
Ile	Phe	Val	Ile	Cys	Cys	Leu	Thr	Tyr	Cys	Phe	Ala	Pro	Arg	Cys	Arg	260	265	270
Glu	Arg	Arg	Arg	Asn	Glu	Arg	Leu	Arg	Arg	Glu	Ser	Val	His	Pro	Val	275	280	285

<210> 80

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 80

Met	Ser	His	Thr	Arg	Arg	Gln	Gly	Ile	Ser	Pro	Ser	Lys	Cys	Pro	Tyr	
1				5					10					15		
Leu	Asn	Phe	Phe	Arg	Leu	Leu	Val	Leu	Ala	Ser	Leu	Ser	His	Phe	Cys	
			20					25					30			
Ser	Gly	Val	Ile	His	Val	Thr	Lys	Glu	Val	Lys	Glu	Val	Ala	Thr	Leu	
		35					40					45				
Ser	Cys	Gly	His	Asn	Val	Ser	Val	Glu	Glu	Leu	Ala	Gln	Thr	Arg	Ile	
	50					55					60					
His	Trp	Gln	Lys	Glu	Lys	Lys	Met	Val	Leu	Thr	Met	Met	Ser	Gly	Asp	
65					70					75					80	
Met	Asn	Ile	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Phe	Asp	Ile	Thr	
				85					90					95		
Asn	Asn	Leu	Ser	Ile	Val	Ile	Leu	Ala	Leu	Arg	Pro	Ser	Asp	Glu	Gly	
		100						105					110			
Thr	Tyr	Glu	Cys	Val	Val	Leu	Lys	Tyr	Glu	Lys	Asp	Ala	Phe	Lys	Arg	
		115					120					125				
Glu	His	Leu	Ala	Glu	Val	Thr	Leu	Ser	Val	Lys	Ala	Gly	Phe	Pro	Thr	
	130					135					140					
Pro	Ser	Ile	Thr	Asp	Phe	Glu	Ile	Pro	Pro	Ser	Asn	Ile	Arg	Arg	Ile	
145					150					155					160	
Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Glu	Pro	His	Leu	Ser	Trp	Leu	
				165					170					175		
Glu	Asn	Gly	Glu	Glu	Leu	Asn	Ala	Ile	Asn	Thr	Thr	Val	Ser	Gln	Asp	
		180						185					190			
Pro	Gly	Thr	Glu	Leu	Tyr	Thr	Val	Ser	Ser	Lys	Leu	Asp	Phe	Asn	Met	
		195					200					205				
Thr	Ala	Asn	His	Ser	Phe	Val	Cys	Leu	Ile	Lys	Tyr	Gly	His	Leu	Arg	
	210					215					220					
Val	Asn	Gln	Thr	Phe	Asn	Trp	Asn	Thr	Pro	Lys	Gln	Glu	His	Phe	Pro	
225					230					235					240	
Asp	Asn	Leu	Leu	Pro	Ser	Trp	Ala	Ile	Thr	Leu	Ile	Ser	Ala	Asn	Gly	
				245					250					255		
Ile	Phe	Val	Ile	Cys	Cys	Leu	Thr	Tyr	Cys	Phe	Ala	Pro	Arg	Cys	Arg	
		260						265					270			

Glu Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val Arg Pro Val
275 280 285

<210> 81

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 81

Met Ser His Thr Arg Arg Gln Gly Thr Ser Pro Ser Lys Cys Pro Tyr
1 5 10 15

Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Ser Leu Ser His Phe Cys
20 25 30

Ser Gly Val Ile His Met Thr Lys Glu Val Lys Glu Val Ala Thr Leu
35 40 45

Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
50 55 60

Tyr Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
65 70 75 80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
85 90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
100 105 110

Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Gln
115 120 125

Glu His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr
130 135 140

Pro Ser Ile Thr Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
145 150 155 160

Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Phe Trp Leu
165 170 175

Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp
180 185 190

Pro Glu Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met
195 200 205

Thr Thr Asn His Ser Phe Val Cys Leu Ile Lys Tyr Gly His Leu Arg
210 215 220

Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro

225		230		235		240									
Asp	Asn	Leu	Leu	Pro	Ser	Trp	Ala	Ile	Thr	Leu	Ile	Ser	Ala	Asn	Gly
				245					250					255	
Ile	Phe	Val	Ile	Cys	Cys	Leu	Thr	Tyr	Cys	Phe	Ala	Pro	Arg	Cys	Arg
			260					265					270		
Glu	Arg	Arg	Arg	Asn	Glu	Arg	Leu	Arg	Arg	Glu	Ser	Val	His	Pro	Val
		275					280					285			

<210> 82
 <211> 288
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 82

Met	Gly	Tyr	Thr	Arg	Arg	Gln	Gly	Ile	Ser	Pro	Ser	Lys	Cys	Pro	Tyr
1				5				10						15	
Leu	Lys	Phe	Phe	Gln	Leu	Leu	Val	Leu	Ala	Cys	Leu	Ser	His	Phe	Cys
			20					25					30		
Ser	Gly	Val	Ile	His	Val	Thr	Lys	Glu	Val	Lys	Glu	Val	Ala	Thr	Leu
	35						40					45			
Ser	Cys	Gly	His	Asn	Val	Ser	Val	Glu	Glu	Leu	Ala	Gln	Thr	Arg	Ile
	50					55					60				
Tyr	Trp	Gln	Lys	Glu	Lys	Lys	Met	Val	Leu	Thr	Met	Met	Ser	Gly	Asp
65					70					75					80
Met	Asn	Ile	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Phe	Asp	Ile	Thr
				85					90					95	
Asn	Asn	Leu	Ser	Ile	Val	Ile	Leu	Ala	Leu	Arg	Pro	Ser	Asp	Glu	Gly
		100						105					110		
Thr	Tyr	Glu	Cys	Val	Val	Leu	Glu	Tyr	Glu	Lys	Asp	Ala	Phe	Lys	Arg
		115					120					125			
Glu	His	Leu	Ala	Glu	Val	Thr	Leu	Ser	Val	Lys	Ala	Asp	Phe	Pro	Thr
	130						135					140			
Pro	Ser	Ile	Ser	Asp	Phe	Glu	Ile	Pro	Pro	Ser	Asn	Ile	Arg	Arg	Ile
145					150					155					160
Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Glu	Pro	His	Leu	Phe	Trp	Leu
				165					170					175	
Glu	Asn	Gly	Glu	Glu	Leu	Asn	Ala	Ile	Asn	Thr	Thr	Val	Ser	Gln	Asp
		180						185						190	

Pro Glu Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met
195 200 205

Thr Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg
210 215 220

Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
225 230 235 240

Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Ala Asn Gly
245 250 255

Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg
260 265 270

Glu Arg Lys Ser Asn Glu Arg Leu Arg Arg Glu Ser Val His Pro Val
275 280 285

<210> 83

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 83

Met Ser His Thr Arg Arg Gln Gly Ile Ser Pro Ser Lys Cys Pro Tyr
1 5 10 15

Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Cys Leu Ser His Phe Cys
20 25 30

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
35 40 45

Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
50 55 60

Tyr Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
65 70 75 80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
85 90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Ser Ser Asp Glu Gly
100 105 110

Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
115 120 125

Glu His Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr
130 135 140

Pro Ser Ile Thr Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
 145 150 155 160
 Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu
 165 170 175
 Glu Asn Gly Glu Glu Leu Asn Ala Ile Ser Thr Thr Val Ser Gln Asp
 180 185 190
 Pro Glu Thr Glu Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met
 195 200 205
 Thr Thr Asn Arg Ser Phe Val Cys Leu Ile Lys Tyr Gly His Leu Arg
 210 215 220
 Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
 225 230 235 240
 Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly
 245 250 255
 Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg
 260 265 270
 Glu Arg Arg Ser Asn Glu Arg Leu Arg Arg Glu Ser Val Arg Pro Val
 275 280 285

<210> 84
 <211> 288
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 84
 Met Gly His Thr Arg Arg Gln Gly Ile Ser Pro Ser Lys Cys Pro Tyr
 1 5 10 15
 Leu Asn Phe Phe Gln Leu Leu Val Leu Ala Gly Leu Ser His Phe Cys
 20 25 30
 Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
 35 40 45
 Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
 50 55 60
 Tyr Trp Gln Lys Gly Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
 65 70 75 80
 Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
 85 90 95
 Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly

100	105	110
Thr Tyr Glu Cys Val Val Leu Glu Tyr Glu Lys Asp Ala Phe Lys Arg 115 120 125		
Glu His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr 130 135 140		
Pro Ser Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile 145 150 155 160		
Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu 165 170 175		
Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Ala Ser Gln Asp 180 185 190		
Pro Glu Thr Glu Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met 195 200 205		
Thr Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg 210 215 220		
Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro 225 230 235 240		
Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Ala Asn Gly 245 250 255		
Ile Phe Val Ile Cys Cys Leu Ala Tyr Cys Phe Ala Pro Gly Cys Arg 260 265 270		
Glu Arg Lys Ser Asn Glu Arg Leu Arg Arg Glu Ser Val Arg Pro Val 275 280 285		

<210> 85

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 85

Met Gly His Thr Arg Arg Gln Gly Ile Ser Pro Ser Lys Cys Pro Tyr
1 5 10 15

Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Cys Leu Ser His Leu Cys
20 25 30

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
35 40 45

Ser Cys Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
50 55 60

His	Trp	Gln	Lys	Glu	Lys	Lys	Met	Val	Leu	Thr	Met	Met	Ser	Gly	Asp	
65					70					75					80	
Met	Asn	Ile	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Phe	Asp	Ile	Thr	
				85					90					95		
Asn	Asn	Leu	Ser	Ile	Val	Ile	Leu	Ala	Leu	Arg	Pro	Ser	Asp	Glu	Gly	
		100						105					110			
Thr	Tyr	Glu	Cys	Val	Val	Leu	Lys	Tyr	Asp	Lys	Asp	Ala	Phe	Lys	Arg	
	115						120					125				
Glu	His	Leu	Ala	Glu	Val	Thr	Leu	Ser	Val	Lys	Ala	Asp	Phe	Pro	Thr	
	130					135					140					
Pro	Ser	Ile	Ser	Asp	Phe	Glu	Ile	Pro	Pro	Ser	Asn	Ile	Arg	Arg	Ile	
145					150					155					160	
Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Glu	Pro	His	Leu	Ser	Trp	Leu	
				165					170					175		
Glu	Asn	Gly	Glu	Glu	Leu	Asn	Ala	Ile	Asn	Thr	Thr	Val	Ser	Gln	Asp	
		180						185						190		
Pro	Glu	Thr	Glu	Leu	Tyr	Thr	Val	Ser	Ser	Lys	Leu	Asp	Phe	Asn	Met	
		195					200					205				
Thr	Ala	Asn	His	Ser	Phe	Val	Cys	Leu	Ile	Lys	Tyr	Gly	His	Leu	Arg	
	210					215					220					
Val	Asn	Gln	Thr	Phe	Asn	Trp	Asn	Thr	Pro	Lys	Gln	Glu	His	Phe	Pro	
225					230					235					240	
Asp	Asn	Leu	Leu	Pro	Ser	Trp	Ala	Ile	Thr	Leu	Ile	Ser	Val	Asn	Gly	
			245						250					255		
Ile	Phe	Val	Ile	Cys	Cys	Leu	Thr	Tyr	Arg	Phe	Ala	Pro	Arg	Cys	Arg	
		260						265					270			
Glu	Arg	Lys	Ser	Asn	Glu	Arg	Leu	Arg	Arg	Glu	Ser	Val	Arg	Pro	Val	
	275						280					285				

<210> 86

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 86

Met	Gly	His	Thr	Arg	Arg	Gln	Gly	Thr	Ser	Pro	Ser	Lys	Cys	Pro	Tyr	
1				5				10						15		

Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Gly Leu Ser His Phe Cys
 20 25 30
 Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
 35 40 45
 Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
 50 55 60
 His Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
 65 70 75 80
 Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
 85 90 95
 Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
 100 105 110
 Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
 115 120 125
 Glu His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr
 130 135 140
 Pro Ser Ile Ser Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
 145 150 155 160
 Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Phe Trp Leu
 165 170 175
 Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp
 180 185 190
 Pro Glu Thr Glu Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met
 195 200 205
 Thr Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg
 210 215 220
 Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
 225 230 235 240
 Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Ala Asn Gly
 245 250 255
 Ile Phe Val Ile Cys Cys Leu Thr Tyr Arg Phe Ala Pro Arg Cys Arg
 260 265 270
 Glu Arg Lys Ser Asn Glu Thr Leu Arg Arg Glu Ser Val Arg Pro Val
 275 280 285

<210> 87

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 87

Met	Gly	His	Thr	Arg	Arg	Gln	Gly	Thr	Ser	Pro	Ser	Lys	Cys	Pro	Tyr	
1				5					10					15		
Leu	Lys	Phe	Phe	Gln	Leu	Leu	Val	Met	Ala	Cys	Leu	Ser	His	Phe	Cys	
			20					25					30			
Ser	Gly	Val	Ile	His	Val	Thr	Lys	Glu	Val	Lys	Glu	Val	Ala	Thr	Leu	
		35					40					45				
Ser	Cys	Gly	His	Asn	Val	Ser	Val	Glu	Glu	Leu	Ala	Gln	Thr	Arg	Ile	
	50					55					60					
His	Trp	Gln	Lys	Glu	Lys	Lys	Met	Val	Leu	Thr	Met	Met	Ser	Gly	Asp	
65					70					75					80	
Met	Asn	Ile	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Phe	Asp	Ile	Thr	
				85					90						95	
Asn	Asn	Leu	Ser	Ile	Val	Ile	Leu	Ala	Leu	Arg	Pro	Ser	Asp	Glu	Gly	
		100						105						110		
Thr	Tyr	Glu	Cys	Val	Val	Leu	Lys	Tyr	Glu	Lys	Asp	Ala	Phe	Lys	Arg	
		115					120						125			
Glu	His	Leu	Ala	Glu	Val	Met	Leu	Ser	Val	Lys	Ala	Asp	Phe	Pro	Thr	
		130				135						140				
Pro	Ser	Ile	Ser	Asp	Phe	Glu	Ile	Pro	Thr	Ser	Asn	Ile	Arg	Arg	Ile	
145					150					155					160	
Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Glu	Pro	His	Leu	Phe	Trp	Leu	
				165					170					175		
Glu	Asn	Gly	Glu	Glu	Leu	Asn	Ala	Ile	Asn	Thr	Thr	Val	Ser	Gln	Asp	
		180						185					190			
Pro	Glu	Thr	Glu	Leu	Tyr	Thr	Val	Ser	Ser	Lys	Leu	Asp	Phe	Asn	Met	
		195					200					205				
Thr	Thr	Asn	His	Ser	Phe	Met	Cys	Leu	Ile	Lys	Tyr	Gly	His	Leu	Arg	
		210				215					220					
Val	Asn	Gln	Thr	Phe	Asn	Trp	Asn	Thr	Pro	Lys	Gln	Glu	His	Phe	Pro	
225					230					235					240	
Asp	Asn	Leu	Leu	Pro	Ser	Trp	Ala	Ile	Thr	Leu	Ile	Ser	Val	Asn	Gly	
				245					250					255		
Ile	Phe	Val	Ile	Cys	Cys	Leu	Thr	Tyr	Cys	Phe	Ala	Pro	Arg	Cys	Arg	
		260						265					270			
Glu	Arg	Arg	Arg	Asn	Glu	Arg	Leu	Arg	Arg	Glu	Ser	Val	Cys	Pro	Val	

275

280

285

<210> 88

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 88

Met Gly His Thr Arg Arg Gln Gly Ile Ser Pro Ser Lys Cys Pro Tyr
 1 5 10 15

Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Cys Leu Ser His Phe Cys
 20 25 30

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
 35 40 45

Ser Cys Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
 50 55 60

His Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
 65 70 75 80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
 85 90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
 100 105 110

Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
 115 120 125

Glu His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr
 130 135 140

Pro Ser Ile Ser Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
 145 150 155 160

Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu
 165 170 175

Glu Asn Gly Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp
 180 185 190

Pro Glu Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met
 195 200 205

Thr Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg
 210 215 220

Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
 225 230 235 240

Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly
245 250 255

Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg
260 265 270

Glu Arg Arg Arg Asn Glu Thr Leu Arg Arg Glu Ser Val Arg Pro Val
275 280 285

<210> 89

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 89

Met Gly His Thr Arg Arg Gln Gly Ile Ser Pro Ser Lys Cys Pro Tyr
1 5 10 15

Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Gly Leu Pro His Leu Cys
20 25 30

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
35 40 45

Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
50 55 60

His Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
65 70 75 80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
85 90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
100 105 110

Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
115 120 125

Glu His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr
130 135 140

Pro Ser Ile Thr Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
145 150 155 160

Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu
165 170 175

Glu Asn Gly Glu Glu Leu Asn Ala Ile Ser Thr Thr Val Ser Gln Asp
180 185 190

Pro Glu Thr Glu Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met
195 200 205

Thr Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg
210 215 220

Val Asn Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro
225 230 235 240

Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Ala Asn Gly
245 250 255

Ile Phe Val Ile Cys Cys Leu Thr His Cys Phe Ala Pro Arg Cys Arg
260 265 270

Glu Arg Lys Arg Asn Glu Arg Leu Arg Arg Glu Ser Val Arg Pro Val
275 280 285

<210> 90

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 90

Met Ser His Thr Arg Arg Gln Gly Thr Ser Pro Ser Lys Cys Pro Tyr
1 5 10 15

Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Gly Leu Ser His Leu Cys
20 25 30

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
35 40 45

Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
50 55 60

His Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
65 70 75 80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
85 90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
100 105 110

Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
115 120 125

Glu His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr
130 135 140

Pro Ser Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile

145	150	155	160
Ile Cys Ser Thr	Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu		
	165	170	175

Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp
180 185 190

Pro Glu Thr Glu Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met
195 200 205

Thr Ala Asn His Ser Phe Val Cys Leu Ile Lys Tyr Gly His Leu Arg
210 215 220

Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
225 230 235 240

Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly
245 250 255

Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg
260 265 270

Glu Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val Arg Pro Val
275 280 285

<210> 91

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 91

Met Gly His Thr Arg Arg Gln Gly Ile Ser Pro Ser Lys Cys Pro Tyr
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Leu Asn Phe Phe Gln Leu Leu Val Leu Ala Cys Leu Ser His Phe Cys
20 25 30

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
35 40 45

Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
50 55 60

His Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
65 70 75 80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
85 90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
100 105 110

Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
 115 120 125
 Glu His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr
 130 135 140
 Pro Ser Ile Thr Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
 145 150 155 160
 Ile Cys Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Phe Trp Leu
 165 170 175
 Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp
 180 185 190
 Pro Glu Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met
 195 200 205
 Thr Thr Asn His Ser Phe Met Cys Leu Ile Arg Tyr Gly His Leu Arg
 210 215 220
 Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
 225 230 235 240
 Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly
 245 250 255
 Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg
 260 265 270
 Glu Arg Lys Ser Asn Glu Arg Leu Arg Arg Glu Ser Val Arg Pro Val
 275 280 285

<210> 92

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 92

Met Gly His Thr Arg Arg Gln Gly Thr Ser Pro Ser Lys Cys Pro Tyr
 1 5 10 15

Leu Asn Phe Phe Gln Leu Leu Val Leu Ala Cys Leu Ser His Phe Cys
 20 25 30

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
 35 40 45

Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
 50 55 60

His Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
65 70 75 80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
85 90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
100 105 110

Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
115 120 125

Glu His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr
130 135 140

Pro Ser Ile Thr Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
145 150 155 160

Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu
165 170 175

Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Ala Ser Gln Asp
180 185 190

Pro Glu Thr Glu Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met
195 200 205

Thr Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg
210 215 220

Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
225 230 235 240

Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly
245 250 255

Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg
260 265 270

Glu Arg Lys Ser Asn Glu Arg Leu Arg Arg Glu Ser Val Arg Pro Val
275 280 285

<210> 93

<211> 288

<212> PRT

<213> Papio sp.

<400> 93

Met Gly His Thr Arg Arg Gln Gly Ile Ser Pro Ser Lys Cys Pro Tyr
1 5 10 15

Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Cys Leu Ser His Phe Cys
20 25 30

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
35 40 45

Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
 50 55 60
 Tyr Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
 65 70 75 80
 Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
 85 90 95
 Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
 100 105 110
 Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
 115 120 125
 Glu His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr
 130 135 140
 Pro Ser Ile Thr Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
 145 150 155 160
 Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Phe Trp Leu
 165 170 175
 Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp
 180 185 190
 Pro Gly Thr Glu Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met
 195 200 205
 Thr Thr Asn His Ser Phe Val Cys Leu Ile Lys Tyr Gly His Leu Arg
 210 215 220
 Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
 225 230 235 240
 Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly
 245 250 255
 Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg
 260 265 270
 Glu Arg Arg Arg Asn Glu Thr Leu Arg Arg Glu Ser Val Arg Pro Val
 275 280 285

<210> 94
 <211> 288
 <212> PRT
 <213> Pongo pygmaeus

<400> 94
 Met Gly His Thr Arg Arg Gln Gly Thr Ser Pro Ser Lys Cys Pro Tyr
 1 5 10 15
 Leu Asn Phe Phe Gln Leu Leu Val Leu Ala Ser Leu Ser His Phe Cys

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Ser	Gly	Val	Ile	His	Val	Thr	Lys	Glu	Val	Lys	Glu	Val	Ala	Thr	Leu	
35					40					45						
Ser	Cys	Gly	His	Asn	Val	Ser	Val	Glu	Glu	Leu	Ala	Gln	Thr	Arg	Ile	
50					55					60						
Tyr	Trp	Gln	Lys	Glu	Lys	Lys	Met	Val	Leu	Thr	Met	Met	Ser	Gly	Asp	
65					70					75					80	
Met	Asn	Ile	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Phe	Asp	Ile	Thr	
85					90					95						
Asn	Asn	Leu	Ser	Ile	Val	Ile	Leu	Ala	Leu	Arg	Pro	Ser	Asp	Glu	Gly	
100					105					110						
Thr	Tyr	Glu	Cys	Val	Val	Leu	Lys	Tyr	Glu	Lys	Asp	Ala	Phe	Lys	Arg	
115					120					125						
Glu	His	Leu	Ala	Glu	Val	Thr	Leu	Ser	Val	Lys	Ala	Asp	Phe	Pro	Thr	
130					135					140						
Pro	Ser	Ile	Ser	Asp	Phe	Glu	Ile	Pro	Thr	Ser	Asn	Ile	Arg	Arg	Met	
145					150					155					160	
Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Glu	Pro	His	Leu	Ser	Trp	Leu	
165					170					175						
Glu	Asn	Gly	Glu	Glu	Leu	Asn	Ala	Ile	Ser	Thr	Thr	Val	Ser	Gln	Asp	
180					185					190						
Pro	Glu	Thr	Glu	Leu	Tyr	Ala	Val	Ser	Ser	Lys	Leu	Asp	Phe	Asn	Met	
195					200					205						
Thr	Thr	Asn	His	Ser	Phe	Met	Cys	Leu	Ile	Lys	Tyr	Gly	His	Leu	Arg	
210					215					220						
Val	Asn	Gln	Thr	Phe	Asn	Trp	Asn	Thr	Pro	Lys	Gln	Glu	His	Phe	Pro	
225					230					235					240	
Asp	Asn	Leu	Leu	Pro	Ser	Trp	Ala	Ile	Thr	Leu	Ile	Ser	Val	Asn	Gly	
245					250					255						
Ile	Phe	Val	Ile	Cys	Cys	Leu	Thr	Tyr	Cys	Phe	Ala	Pro	Arg	Cys	Arg	
260					265					270						
Glu	Arg	Arg	Ser	Asn	Glu	Arg	Leu	Arg	Arg	Glu	Ser	Val	Arg	Pro	Val	
275					280					285						

<210> 95

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<220>

<221> modified_base

<222> (213)

<223> A, T, C, G, other or unknown

<400> 95

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accaaaagag tgaaagaaac agtaatgcta tctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggtatcta ttggcgaaag gatagtaaaa tgntgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgtacca tctgtgacat gaacgataac 300
ctccgtattg tgatcctggc tctgcgctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg atttgaaagg ggcttataaa ctggagcacc tgacttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaagc cccacctcta ctggttggaa 540
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tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtt ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtg tttggtgctc 780
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tctcgggct ga                                     912
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<210> 96

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 96

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accaaaagag tgaaagaaac agtaatgcta tctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggtatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
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ccccgtattg tgatcctggc tctgcgctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tgacttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaagc cccacctcta ctggttggaa 540
aatggagaag aattaaatgc taccaacaca aactgtccc aagatcctga aaccaagctc 600
tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtg tttggtgctc 780
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<210> 97

<211> 930

<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<220>
<221> modified_base
<222> (929)
<223> A, T, C, G, other or unknown

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acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaaaaa 180
ctgacaagcc ttcggaacta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcatgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tgacttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctcta ctggttggaa 540
aatggagaag aattaaatgc taccaacaca acagtttccc aagatcctga aaccaagctc 600
tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtg tttgggtgctc 780
actgcggtag ttctctactg cccggcctgc agacatgttg cgaggtggaa aagaacaaga 840
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<210> 98
<211> 912
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

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acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggaacta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
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ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tggcttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
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aatggagaag aattaaatgc taccaacaca acagtttccc aagatcctgg aactgagctc 600
tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtg tttgggtgctc 780
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<210> 99
<211> 912
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

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acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
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agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctcta ctggttggaa 540
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tacctgatta gcagtgaact ggatttcaat gtgacaaata accacagcat tgtgtgtctc 660
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cctcccattg atcagcttcc attccgggtc attatcccag taagtgggtgc tttgggtgctc 780
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tcctcgggct ga 912

<210> 100
<211> 912
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

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ctgacaagcc ttccgatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
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cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tgacttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctcta ctggttggaa 540
aatggagaag aattaaatgc taccaacaca acagtttccc aagatcctgg aactgagctc 600
tacctgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtgc tttgggtgctc 780
actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtggaa aagaacaaga 840
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tcctcgggct ag 912

<210> 101
<211> 909
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

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ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgcgtgggt 360
cagaagaatg agaacgggtc tttcagacgg gagcacctga cctccgtgac actgtccatc 420
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gcggtagtgc tctactgcct ggctgcaga catgttgcca ggtggaaaag aacaagaagg 840
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tcgggctga 909

<210> 102
<211> 912
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

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ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tctactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacaagg gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tggcttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgtcaaac ctctggagggt tttccaaggc cccacctcta ctggttgga 540
aatggagaag aattaaatgc taccaacaca acagtttccc aagatcctgg aactgagctc 600
tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtc tttggtgctc 780
actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtggaa aagaacgaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
tcctcgggct ga 912

<210> 103
<211> 891
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 103

```
atgggtcaca caatgaagtg gggatcacta ccaccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcgatctta ttggcaaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tgacttccgt gaggttaatg 420
atcagagctg acttcctgtt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctcta ctggttggaa 540
aatggagaag aattaaatgc taccaacaca acactgtccc aagatcctga aaccaagctc 600
tacatgatta gcagtgaact ggatttcaac atgacaagca atcacagctt cttgtgtctt 660
gtcaagtatg gagacttaac agtgtcacag accttctact ggcaagaatc caaaccaacc 720
ccttctgcta atcagcacct gacctggacc attattatcc cagtctcagc atttgggatt 780
tctgtgatca ttgcagttat actaacatgc ctgacctgca gaaatgctgc aatacgcaga 840
cagagaaggg agaatgaagt gaaaatgcaa agttgtcttc agtctccata g 891
```

<210> 104
<211> 892
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 104

```
atgggtcaca caatgaagtg gggatcacta ccaccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcgatctta ttggcaaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg atttgaaagg ggcttataaa ctggagcacc tgacttccgt gaggttaatg 420
atcagagctg acttcctgtt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctcta ctggttggaa 540
aatggagaag aattaaatgc taccaacaca acactgtccc aagatcctga aaccaagctc 600
tacatgatta gcagtgaact ggatttcaac atgacaagca atcacagctt cttgtgtctt 660
gtcaagtatg gagacttaac agtgtcacag accttctact ggcaagaatc caaaccaacc 720
ccttctgcta atcagcacct gacctggacc attattatcc cagtctcagc atttgggatt 780
tctgtgatca ttgcagttat actaacatgc ctgacctgca gaaatgctgc aatacgcaga 840
cagagaaggg agaatgaagt gaaaatgcaa agttgtcttc agtctccatg ag 892
```

<210> 105
<211> 828
<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 105

```
atggggtcaca caatgaagtg gggatcacta ccaccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
accaaaagag tgaaagaaac agtaatgcta tcctgtgatt acagcacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacaagg gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tgacctccgt gacactgtcc 420
atcagagctg acttcctgtt ccctagcata actgacattg gacatcccgc ccctaattgtg 480
aaaaggataa gatgtctcgc ctctggaggt tttccagagc ctgcctcgc ctggatggaa 540
gatggagaag aactaaacgc cgtcaacacg acggttgacc aggatttga cacggagctc 600
tacagcgtca gcagtgaact ggatttcaat gcgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attgtcccag taagtgggtg tttgggtgctc 780
actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtga 828
```

<210> 106

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 106

```
atggggtcaca caatgaagtg gggatcacta ccaccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
accaaaagag tgaaagaaac agtaatgcta tcctgtgatt acagcacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tgacttccgt gaggttaatg 420
atcagagctg acttcctgtt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaaggc ccacactcta ctggttgga 540
aatggagaag aattaaatgc taccaacaca aactgtccc aagatcctgg aactgagctc 600
tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtg tttgggtgctc 780
actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtggaa aagaacaaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcacaa 900
tcctcgggct ga 912
```

<210> 107

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 107

```
atgggtcaca caatgaagtg gggatcacta ccaccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcaactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tgacttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctcta ctggttgga 540
aatggagaag aattaaatgc taccaacaca acagtttccc aagatcctgg aactgagctc 600
tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgcgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtg tttggtgctc 780
actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtggaa aagaacaaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
tcctcgggct ag                                     912
```

<210> 108

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 108

```
atgggtcaca caatgaagtg gggatcacta ccaccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acagcacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcaactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tggcttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctcta ctggttgga 540
aatggagaag aattaaatgc taccaacaca acagtttccc aagatcctgg aactgagctc 600
tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtg tttggtgctc 780
actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtggaa aagaacaaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
tcctcgggct ga                                     912
```

<210> 109

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

nucleotide sequence

<400> 109

```

atgggtcaca caatgaagtg gggatcacta ccaccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acagcacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg atttgaaagg ggcttataaa ctggagcacc tgacttccgt gaggttaatg 420
atcagagctg acttccctgt ccctagcata actgacattg gacatcccg cctaataatg 480
aaaaggataa gatgctccgc ctctggagat tttccagagc ctgcctcgc ctggatggaa 540
gatggagaag aactaaacgc cgtcaacacg acggttgacc aggatttga cacggagctc 600
tacagcgtca gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtg tttggtgctc 780
actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtggaa aagaacaaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
tcctcgggct ga
912

```

<210> 110

<211> 913

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 110

```

atgggtcaca caatgaagtg gggatcacta ccaccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tggcttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggagggt tttccaaggc cccacctcta ctggttgga 540
aatggagaag aattaaatgc taccaacaca acagtttccc aagatcctgg aactgagctc 600
tacatgatta gcagtgaact gggtttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtg tttggtgctc 780
actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtggaa aagaacaaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
tcctcgggct gag
913

```

<210> 111

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<220>
<221> modified_base
<222> (827)
<223> A, T, C, G, other or unknown

<400> 111
atgggtcaca caatgaagtg gggatcacta ccaccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acagcacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcaactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tggcttctgt gagggttaatg 420
atcagagctg acttcctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccaccteta ctggttgga 540
aatggagaag aattaaatgc taccaacaca acagtttccc aagatcctgg aactgagctc 600
tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtgc tttgggtgctc 780
actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtngaa aagaacaaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccocta tctacttagg ctctgcgcaa 900
tcctcgggct ag 912

<210> 112
<211> 882
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 112
atgggccaca cgctgaggcc gggaaactcca ctgcccaggt gtctacacct caagctctgc 60
ctgctcttgg cgctggcggg tctccacttc tcttcaggta tcagccaggt caccaagtcg 120
gtgaaagaaa tggcagcact gtccctgtgat tacaacattt ctatcgatga actggcgaga 180
atgcgcataat actggcagaa ggaccaacag atggtgtctga gcatcatctc tgggcaagtg 240
gaggtgtggc ctgagtacaa gaaccgcacc atcaactgaca tgaacgataa cccccgtatt 300
gtgatcctgg ctctgcgcct gtccggacagt ggcacctaca cctgtgttat tcagaagcct 360
gttttgaaaag gggcttataa accggagcac ctggcttccg tgaggttaat gatcagagct 420
gacttccctg tccctaccat aaatgatctt ggaaatccat ctccataatc cagaaggcta 480
atttgctcaa cctctggagg ttttccaagg cccacctct actggttga aaatggagaa 540
gaattaaatg ctaccaacac aacactgtcc caagatcctg aaaccaagct ctacatgatt 600
agcagtgaac tggatttcaa catgacaagc aatcacagct tcttgtgtct tgtcaagtat 660
ggagacttaa cagtgtcaca gaccttctac tggcaagaat ccaaaccaac cccttctgct 720
aatcagcacc tgacctggac cattattatc ccagtctcag catttgggat ttctgtgatc 780
attgcagtta tactaacatg cctgacctgc agaaatgtct caatacgag acagagaagg 840
gagaatgaag tggaaatgca aagttgctct cagtctccat ag 882

<210> 113
<211> 906
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 113

```
atgggtcaca caatgaagtg gggatcacta ccacccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tctactgacat gaacgataac 300
ccccgtattg tgatccaggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatac 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tggcttcctg gaggttaatg 420
atcagagctg acttccctgt ccctactgat cttggaaatc catctcctaa tatcagaagg 480
ctaatttctg caacctctgg aggttttcca agggccacc tctactgggt ggaaaatgga 540
gaagaattaa atgctaccaa cacaacagtt tcccaagatc ctggaactga gctctacatg 600
attagcagtg aactggattt caatgtgaca aataaccaca gcatcgtgtg tctcatcaaa 660
tacggggagc tgcgggtgac acagatcttc ccttggagca aaccaagca ggagcctccc 720
attgatcagc ttccattctg ggtcattatc ccagtaagtg gtgcttttgt gctcactgcg 780
gtagtctctc actgcctggc ctgcagacat gttgcgaggt ggaaaagaac aagaaggaat 840
gaagagacag tgggaactga aaggctgtcc cctatctact taggctctgc gcaatcctcg 900
ggctga                                           906
```

<210> 114

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 114

```
atgggtcaca caatgaagtg gggatcacta ccacccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tctactgacat gaacgataac 300
ccccgtattg tgatccctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tgacttcctg gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tctaatatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctcta ctggttgga 540
aatggagaag aattaaatgc taccaacaca acactgtccc aagatcctga aaccgagctc 600
tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtg tttgggtgctc 780
actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtggaa aagaacaaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
tcctcgggct ga                                           912
```

<210> 115

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 115

```
atgggtcaca caatgaagtg gggatcacta ccacccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acagcacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcttgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tgacttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctcta ctggttgga 540
aatggagaag aattaaatgc taccaacaca acagtttccc aagatcctgg aactgagctc 600
tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctccattg atcagcttcc attctgggtc attatcccag taagtgggtg tttgggtgctc 780
actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtggaa aagaacaaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
tctcgggct ga 912
```

<210> 116

<211> 910

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 116

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atgggtcaca caatgaagtg gggatcacta ccacccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcttgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgcgtgggt 360
cagaagaatg agaacgggtc tttcagacgg gagcacctga cctccgtgac actgtccatc 420
agagctgact tccctgtccc tagcataact gacattggac atcccgcctc taatgtgaaa 480
aggataagat gctccgcctc tggagatttt ccagagcctc gcctcgctg gatggaagat 540
ggagaagaac taaacgccgt caacacgacg gttgaccagg atttgacac ggagctctac 600
agcgtcagca gtgaactgga tttcaatgtg acaaataacc acagcatcgt gtgtctcatc 660
aaatacgggg agctgtcggg gtcacagatc ttccttgga gcaaaccctc gcaggagcct 720
cccattgatc agcttccatt ctgggtcatt atcctagtaa gtggtgcttt ggtgctcact 780
gcggtagttc tctactgcct ggctgcaga catgttgca ggtggaaaag aacaagaagg 840
aatgaagaga cagtgggaac tgaaaggctg tcccctatct acttaggctc tgcgcaatcc 900
tcgggctgag 910
```

<210> 117

<211> 903

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

nucleotide sequence

<400> 117

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atggggtcaca caatgaagtg gggatcacta ccacccaagc gcccattgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acagcacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcttgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tggcttccgt gaggttaatg 420
atcagagctg acttccctgt ccctagcata actgacattg gacatcccgc ccctaattgtg 480
aaaaggataa gatgctccgc ctctggagat tttccagagc ctgcctcgc ctggatggaa 540
gatggagaag aactaaacgc cgtcaacacg acggttttgg acacggagct ctacagcgtc 600
agcagtgaac tggatttcaa tgtgacaaat aaccacagca tcgtgtgtct catcaaatac 660
ggggagctgt cgggtgcaca gatcttccct tggagcaaac ccaagcagga gcctccatt 720
gatcagcttc cattctgggt cattatccca gtaagtgggt ctttgggtgt cactgcggtg 780
gttctctact gcctggcctg cagacatgtt gcgaggtgga aaagaacaag aaggaatgaa 840
gagacagtgg gaactgaaag gctgtcccct atctacttag gctctgcgca accctcgggc 900
tga 903
```

<210> 118

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 118

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atggggtcaca caatggagtg gggatcacta ccacccaagc gcccattgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcttgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tggcttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaagc cccacctcta ctggttagaa 540
aatggagaag aattaaatgc taccaacaca aactgtccc aagatcctga aactgagctc 600
tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctccattg atcagcttcc attctgggtc attatcccag taagtgggtg tttggtgctc 780
actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtggaa aagaacaaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
tcctcgggct ga 912
```

<210> 119

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 119

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atgggtcaca caatgaagtg gggatcacta ccacccaagc gcccattgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acagcacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaaag gatagtaaaa tgggtgctggc catcctgccc 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcaactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tggcttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccagagc ctgcctcgc ctggatggaa 540
gatggagaag aactaaacgc cgtcaacacg acggttgacc aggatttga cacggagctc 600
tacagcgtca gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatagc gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtg tttggtgctc 780
actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtggaa aagaacaaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
tcctcgggct ga 912
```

<210> 120

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 120

```
atgggtcaca caatgaagtg gggatcacta ccacccaagc gcccattgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acagcacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcaactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tggcttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctcta ctggttggaa 540
aatggagaag aattaaatgc taccaacaca acactgtccc aagatcctga aaccaagctc 600
tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatagc gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtg tttggtgctc 780
actgcagtag ttctctactg cctggcctgc agacatgttg cgaggtggaa aagaacaaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
tcctcgggct ga 912
```

<210> 121

<211> 913

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 121

```
atgggtcaca caatgaagtg gggatcacta ccaccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tctgtgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgctg tggacagtg gcacctacac ctgtgttatt 360
cagaagcctg atttgaaagg ggcttataaa ctggagcacc tgacttccgt gaggttaatg 420
atcagagctg acttccctgt ccctagcata actgacattg gacatccccg ccctaattgtg 480
aaaaggataa gatgtccgc ctctggagat tttccagagc ctgcctcgc ctggatggaa 540
gatggagaag aactaaacgc cgtcaacacg acggttgacc aggatttga cacggagctc 600
tacagcgtca gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtc tttgggtgctc 780
actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtggaa aagaacaaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
tctcgggct gag 913
```

<210> 122

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 122

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atgggtcaca caatgaagtg gggatcacta ccaccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tctgtgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgctg tggacagtg gcacctacac ctgtgttatt 360
cagaagcctg atttgaaagg ggcttataaa ctggagcacc tggttccgt gaggttaatg 420
atcagagctg acttccctgt ccctagcata actgacattg gacatccccg ccctaattgtg 480
aaaaggataa gatgtccgc ctctggagat tttccagagc ctgcctcgc ctggatggaa 540
gatggggaag aactaaacgc cgtcaacacg acggttgacc aggatttga cacggagctc 600
tacagcgtca gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagcgggtc tttgggtgctc 780
actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtggaa aagaacaaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
tctcgggct ag 912
```

<210> 123

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 123

atggggtcaca	caatgaagtg	gggatcacta	ccaccaagc	gcccattgcct	ctggctctct	60
cagctcttgg	tgctcactgg	tcttttttac	ttctgttcag	gcatcacccc	aaagagtgtg	120
acaaaaagag	tgaaagaaac	agtaatgcta	tctgttgatt	acaacacatc	cactgaagaa	180
ctgacaagcc	ttcggatcta	ttggcaaaag	gatagtaaaa	tggtgctggc	catcctgcct	240
ggaaaagtgc	aggtgtggcc	tgagtacaag	aaccgcacca	tactgacat	gaacgataac	300
ccccgtattg	tgatcctggc	tctgcgcctg	tggacagtg	gcacctacac	ctgtgttatt	360
cagaagcctg	ttttgaaagg	ggcttataaa	ctggagcacc	tggttccgt	gaggttaatg	420
atcagagctg	acttccctgt	ccctagcata	aatgatcttg	gaaatccatc	tcctaataatc	480
agaaggctaa	tttgcctaac	ctctggaggt	tttccaaggc	cccacctcta	ctggttgga	540
aatggagaag	aattaaatgc	taccaacaca	acagtttccc	aagatcctgg	aactgagctc	600
tacatgatta	gcagtgaact	ggatttcaat	gtgacaaata	accacagcat	cgtgtgtctc	660
atcaaatacg	gggagctgtc	gggtgtcacg	atcttccctt	ggagcaaacc	caagcaggag	720
cctcccattg	atcagcttcc	attctgggtc	attatcccag	taagtgtgtc	tttgggtgtc	780
actgcggtag	ttctctactg	cctggcctgc	agacatgttg	cgaggtggaa	aagaacaaga	840
aggaatgaag	agacagtggg	aactgaaagg	ctgtccccta	tctacttagg	ctccgcgcaa	900
tcctcgggct	ga					912

<210> 124

<211> 909

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 124

atggggtcaca	caatgaagtg	gggatcacta	ccaccaagc	gcccattgcct	ctggctctct	60
cagctcttgg	tgctcactgg	tcttttttac	ttctgttcag	gcatcacccc	aaagagtgtg	120
acaaaaagag	tgaaagaaac	agtaatgcta	tctgttgatt	acagcacatc	cactgaagaa	180
ctgacaagcc	ttcggatcta	ttggcaaaag	gatagtaaaa	tggtgctggc	catcctgcct	240
ggaaaagtgc	aggtgtggcc	tgagtacaaa	aaccgcacct	tccccgacat	cattaacaac	300
ctctccctta	tgatcctggc	actgcgcctg	tggacaagg	gcacctacac	ctgcgtggtt	360
cagaagaatg	agaacgggtc	tttcagacgg	gagcacctga	cctccgtgac	actgtccatc	420
agagctgact	tccctgtctc	tagcataact	gacattggac	atcccgcctc	taatgtgaaa	480
aggataagat	gctccgcctc	tggaggtttt	ccagagcctc	gcctcgcctg	gatggaagat	540
ggagaagaac	taaacgccgt	caacacgacg	gttgaccagg	atttgacac	ggagctctac	600
agcgtcagca	gtgaactgga	tttcaatgtg	acaaataacc	acagcattgt	gtgtctcatc	660
aaatacgggg	agctgtcggt	gtcacagatc	ttcccttgga	gcaaacccaa	gcaggagcct	720
cccattgatc	agcttccatt	ctgggtcatt	atcccagtaa	gtggtgcttt	ggtgtcact	780
gcggtagttc	tctactgcct	ggcctgcaga	catgttgca	ggtggaaaag	aacaagaagg	840
aatgaagaga	cagtgggaac	tgaaaggctg	tcccctatct	acttaggctc	tgcgcaatcc	900
tcgggctga						909

<210> 125

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 125

atggggtcaca	caatgaagtg	gggatcacta	ccaccaagc	gcccattgcct	ctggctctct	60
-------------	------------	------------	-----------	-------------	------------	----

```

cagctcttgg tgctcactgg tctttttttac ttctgttcag gcatcacccc aaagagtgtg 120
accaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcaactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgccctg tcggacagtgc gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tgacttccgt gaggttaatg 420
atcagagctg acttccctgt ccctagcata actgacattg gacatcccgc ccctaatgtg 480
aaaaggataa gatgctccgc ctctggagggt tttccagagc ctcgcctcgc ctggatggaa 540
gatggagaag aactaaacgc cgtcaacacg acggttgacc aggatttggg cacggagctc 600
tacagcgtca gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc attctgggtc attatcccag taagtgtgtc tttggtgctc 720
cctcccattg atcagcttcc cctggcctgc agacatgttg cgaggtggaa aagaacaaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
tcctcgggct ga

```

912

<210> 126

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 126

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atgggtcaca caatgaagtg gggatcacta ccacccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactga tctttttttac ttctgttcag gcatcacccc aaagagtgtg 120
accaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcaactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgccctg tcggacagtgc gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tggcttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggagggt tttccaaggc cccacctcta ctggttggaa 540
aatggagaag aattaaatgc taccaacaca acagtttccc aagatccctg aactgagctc 600
tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgtgtc tttggtgctc 780
actgcggtag ttctctactg cctggcctgc agacatgttg caaggtggaa aagaacaaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
tcctcgggct ga

```

912

<210> 127

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 127

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atgggtcaca caatgaagtg gggatcacta ccacccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tctttttttac ttctgttcag gcatcacccc aaagagtgtg 120

```

```

accaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcaactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtgc gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tggcttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctcta ctgggtggaa 540
aatggagaag aattaaatgc taccaacaca acactgtccc aagatcctga aaccaagctc 600
tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtgc tttgggtgctc 780
actgcgccag ttctctactg cctggcctgc agacatgttg cgagggtggaa aagaacaaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
tcctcgggct ag
912

```

<210> 128

<211> 903

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 128

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atgggtcaca caatgaagtgc gggatcacta ccacccaagc gcccattgct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaagag tgaaagaaac agtaatgcta tcctgtgatt acagcacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcaactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtgc gcacctacac ctgtgttatt 360
cagaagcctg tttttaaagg ggcttataaa ctggagcacc tggcttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcagg ttttccaagg cccacctct actggttga aaatggagaa 540
gaattaaatg ctaccaacac aacagtttcc caagatcctg gaactgagct ctacatgatt 600
agcagtgaac tggatttcaa tgtgacaaat aaccacagca tcgtgtgtct catcaaatac 660
ggggagctgt cgggtgcaca gatcttccct tggagcaaacc ccaagcagga gcctcccatt 720
gatcagcttc cattctgggt cattatccca gtaagtgggt ctttgggtgc cactgcggtg 780
gttctctact gcttggcctg cagacatgtt gcgagggtga aaagaacaag aaggaatgaa 840
gagacagtgg gaactgaaag gctgtccct atctacttag gctctgcgca atcctcgggc 900
tga
903

```

<210> 129

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 129

```

atgggtcaca caatgaagtgc gggatcacta ccacccaagc gcccattgct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaagag tgaaagaaac agtaatgcta tcctgtgatt acagcacatc cactgaagaa 180

```

```

ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tctactgacat gaacgataac 300
ccccgtattg tgatcctggc actgcgcctg tgggacaagg gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tggcttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctcta ctggttggaa 540
aatggagaag aattaaatgc taccaacaca acagtttccc aagatcctgg aactgagctc 600
tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtc tttgggtgctc 780
actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtggaa aagaacaaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
tcctcgggct ga

```

912

<210> 130

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 130

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atgggtcaca caatgaagtg gggatcacta ccacccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acagcacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tctactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tgggacagtg gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tggcttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctcta ctggttggaa 540
aatggagaag aattaaatgc taccaacaca acagtttccc aagatcctgg aactgagctc 600
tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtc tttgggtgctc 780
actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtggaa aagaacaaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
tcctcgggct ag

```

912

<210> 131

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 131

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atgggtcaca caatgaagtg gggatcacta ccacccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240

```

```

ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcaactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg atttgaaagg ggcttataaa ctggagcacc tggcttccgt gaggttaatg 420
atcagagctg acttccctgt ccctagcata actgacattg gacatcccgc ccctaattgtg 480
aaaaggataa gatgctccgc ctctggaggt tttccagagc ctgcctcgc ctggatggaa 540
gatggagaag aactaaacgc cgtcaacacg acggttgacc aggatttgga cacggagctc 600
tacagcgtca gcagtgaact ggatttcaac atgacaagca atcacagctt cttgtgtctt 660
gtcaagtatg gagacttaac agtgtcacag accttctact ggcaagaatc caaaccaacc 720
ccttctgcta atcagcacct gacctggacc attattatcc cagtctcagc atttgggatt 780
tctgtgatca ttgcagttat actaacatgc ctgacctgca gaaatgctgc aatacgcaga 840
cagagaaggg agaatgaagg gaaatgcaaa gtgctctcag tctccatagg taccaagctt 900
aagtttaacc gc
912

```

<210> 132

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 132

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atgggtcaca caatgaagtg gggatcacta ccaccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcaactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacaagg gcacctacac ctgcgtggtt 360
cagaagcctg atttgaaagg ggcttataaa ctggagcacc tggcttccgt gaggttaatg 420
atcagagctg acttccctgt ccctagcata actgacattg gacatcccgc ccctaattgtg 480
aaaaggataa gatgctccgc ctctggaggt tttccagagc ctgcctcgc ctggatggaa 540
gatggagaag aactaaacgc cgtcaacacg acggttgacc aggatttgga cacggagctc 600
tacagcgtca gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatagc gggagctgtc ggtgtcacag atctttcctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtg tttgtgtctc 780
actgcggtag ttctctactg cctggcctgc agacatgttg cgagggtgga aagaacaaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
tctcgggct ga
912

```

<210> 133

<211> 891

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 133

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atgggtcaca caatgaagtg gggatcacta ccaccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acagcacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcaactgacat gaacgataac 300

```

```

ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tgacttccgt gaggttaatg 420
atcagagctg acttcctgt cctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctcta ctggttggaa 540
aatggagaag aattaaatgc taccaacaca acactgtccc aagatcctga aaccaagctc 600
tacatgatta gcagtgaact ggatttcaac atgacaagca atcacagctt cttgtgtctt 660
gtcaagtatg gagacttaac agtgtcacag tccttctact ggcaagaatc caaaccaacc 720
ccttctgcta atcagcacct gacctggacc attattatcc cagtctcagc atttgggatt 780
tctgtgatca ttgcagttat actaacatgc ctgacctgca gaaatgctgc aatacgcaga 840
cagagaaggg agaatgaagt ggaaatgcaa agttgctctc agtctccatg a 891

```

<210> 134

<211> 909

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 134

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atgggtcaca caatgaagtg gggatcacta ccacccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcaccacccc aaagagtgtg 120
accaaaagag tgaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggtacta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tctactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacaagg gcacctacac ctgcgtgggt 360
cagaagaatg agaacgggtc tttcagacgg gagcacctga cctccgtgac actgtccatc 420
agagctgact tccctgtccc tagcataact gacattggac atcccgcgcc taatgtgaaa 480
aggataagat gtcctgcctc tggaggtttt ccagagcctc gcctcgcttg gatggaagat 540
ggagaagaac taaacgcctg caacacgacg gttgaccagg atttggacac ggagctctac 600
agcgtcagca gtgaactgga tttcaatgtg acaaataacc acagcatcgt gtgtctcatc 660
aaatacgggg agctgtcggg gtcacagatc ttcccttggg gcaaacccaa gcaggagcct 720
cccattgatc agcttccatt ctgggtcatt atcccagtaa gtggtgcttt ggtgctcact 780
gcggtagttc tctactgcct ggccctgcaga catgttgcca ggtggaaaag aacaagaagg 840
aatgaagaga cagtgggaac tgaaaggctg tcccctatct acttaggctc tgcgcaatcc 900
tcgggctag 909

```

<210> 135

<211> 891

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 135

```

atgggtcaca caatgaagtg gggatcacta ccacccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcaccacccc aaagagtgtg 120
accaaaagag tgaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggtacta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tctactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tggcttccgt gaggttaatg 420

```

```

atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctcta ctggttggaa 540
aatggagaag aattaaatgc taccaacaca acactgtccc aagatcctga aaccaagctc 600
tacatgatta gcagtgaact ggatttcaac atgacaagca atcacagctt cttgtgtctt 660
gtcaagtatg gagacttaac agtgtcacag accttctact ggcaagaatc caaaccaacc 720
ccttctgcta atcagcacct gacctggacc attattatcc cagtctcagc atttgggatt 780
tctgtgatca ttgcagttat actaacatgc ctgacctgca gaaatgctgc aatacgcaga 840
cagagaaggg agaatgaagt ggaaatgcaa agttgctctc agtctccatg a 891

```

<210> 136

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 136

```

atgggtcaca caatgaagtg gggatcacta ccaccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
accaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcaactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg atttgaaagg ggcttataaa ctggagcacc tggcttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctcta ctggttggaa 540
aatggagaag aattaaatgc taccaacaca acactgtccc aagatcctga aaccaagctc 600
tacatgatta gcagtgaact ggatttcaat gtgacaaata accgcagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtc tttggtgctc 780
actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtggaa aagaacaaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
tcctcgggct ga 912

```

<210> 137

<211> 891

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 137

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atgggtcaca caatgaagtg gggatcacta ccaccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
accaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcaactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg ttttgaagg ggcttataaa ctggagcacc tgacttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctcta ctggttggaa 540

```

```

aatggagaag aattaaatgc taccaacaca acagtttccc aagatcctga aaccaagctc 600
tacatgatta gcagtgaact ggattttcaac acgacaagca atcacagctt cttgtgtctt 660
gtcaagtatg gagacttaac agtgtcacag accttctact ggcaagaatc caaaccaacc 720
ccttctgcta atcagcacct gacctggacc attattatcc cagtctcagc atttgggatt 780
tctgtgatca ttgcagttat actaacatgc ctgacctgca gaaatgctgc aatacgcaga 840
cagagaaggg agaatgaagt ggaaatgcaa agttgctctc agtctccatg a 891

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<210> 138

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 138

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atggggtcaca caatgaagtg gggatcacta ccacccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacaagg gcacctacac ctgtgttatt 360
cagaagcctg atttgaaagg ggcttataaa ctggagcacc tggcttccgt gaggttaatg 420
atcagagctg acttcctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggagggt tttccaaggc cccacctcta ctgggttgaa 540
aatggagaag aattaaatgc taccaacaca acagtttccc aagatcctgg aactgagctc 600
tacatgatta gcagtgaact ggattttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtgc tttgggtgctc 780
actgcggtag ttctctactg cctggcctgc aggcattgtg cgaggtggaa aagaacaaga 840
aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
tcctcgggct ga 912

```

<210> 139

<211> 891

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 139

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atggggtcaca caatgaagtg gggatcacta ccacccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg atttgaaagg ggcttataaa ctggagcacc tgacttccgt gaggttaatg 420
atcagagctg acttcctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggagggt tttccaaggc cccacctcta ctgggttgaa 540
aatggaaaag aattaaatgc taccaacaca aactgtccc aagatcctga aaccaagctc 600
tacatgatta gcagtgaact ggattttcaac atgacaagca atcacagctt cttgtgtctt 660

```



```

gtcaagtatg gagacttaac agtgtcacag accttctact ggcaagaatc caaaccaacc 720
ccttctgcta atcagcacct gacctggacc attattatcc cagtctcagc atttgggatt 780
tctgtgatca ttgcagttat actaacatgc ctgacctgca gaaatgctgc aatacgcaga 840
cagagaaggg agaatgaagt ggaaatgcaa agttgctctc agtctccatg a 891

```

<210> 140

<211> 910

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 140

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atgggtcaca caatgaagtg gggatcacta ccacccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaagaaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcgatctta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcaactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgctgtggt 360
cagaagaatg agaacgggtc tttcagacgg gagcacctga cctccgtgac actgtccatc 420
agagctgact tccctgtccc tagcataact gacattggac atcccgcgcc taatgtgaaa 480
aggataagat gtcctgcctc tggaggtttt ccagagcctc gcctcgcctg gatggaagat 540
ggagaagaac taaacgccgt caacacgacg gttgaccagg atttggacac ggagctctac 600
agcgtcagca gtgaactgga tttcaatgtg acaaataacc acagcatcgt gtgtctcatc 660
aaatacgggg agctgtcggg gtcacagatc ttcccttggg gcaaacccaa gcaggagcct 720
cccattgata agcttccatt ctgggtcatt atcccagtaa gtggtgcttt ggtgtctact 780
gcggtagtgc tctactgcct ggcttcgaga catgttgaga ggtggaaaag aacaagaagg 840
aatgaagaga cagtgggaac tgaaaggctg tcccctatct acttaggctc tgcgcaatcc 900
tcgggctgag                                     910

```

<210> 141

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 141

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atgggtcaca caatgaagtg gggatcacta ccacccaagc gcccatgcct ccggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaagaaaac agtaatgcta tcctgtgatt acagcacatc cactgaagaa 180
ctgacaagcc ttcgatctta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcaactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg atttgaaagg ggcttataaa ctggagcacc tgacttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctcta ctggttggaa 540
aatggagaag aattaaatgc taccaacaca aactgtccc aagatcctga aaccaagctc 600
tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtg tttggtgctc 780

```

actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtggaa aagaacaaga 840
 aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
 tcctcgggct ga 912

<210> 142

<211> 882

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 nucleotide sequence

<400> 142

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 cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
 accaaaagag tgaaagaaac agtaatgcta tctgtgtgatt acaacacatc cactgaagaa 180
 ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
 ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcaactgacat gaacgataac 300
 ccccgatttg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
 cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tgacttccgt gaggttaatg 420
 atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
 agaaggctaa tttgctcaac ctctggagggt tttccaaggc cccacctcta ctggttgga 540
 aatggagaag aattaaatgc taccaacaca acactgtccc aagatcctga aaccaagctc 600
 tacatgatta gcagtgaact ggatttcaac atgacaagca atttgtgtct tgtcaagtat 660
 ggagacttaa cagtgtcaca gaccttctac tggcaagaat ccaaaccaac cccttctgct 720
 aatcagcacc tgacctggac cattattatc ccagtctcag catttgggat ttctgtgatc 780
 attgcagtta tactaacatg cctgacctgc agaaatgctg caatacgcag acagagaagg 840
 gagaatgaag tggaaatgca aagttgctct cagtctccat ga 882

<210> 143

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 nucleotide sequence

<400> 143

atgagccaca cacggaggca gggaacatca ccatccaagt gtccgtacct caagttcttt 60
 cagttcttgg tgctggctag tctttctcat ttctgttcag gtgttatcca cgtgactaag 120
 gaagtgaag aagtggcaac gctgtcctgt ggtctcaatg tttctgttga agagctggca 180
 caaactcgca tctactggca aaaggggaag aaaatgggtg tgactatgat gtctggggac 240
 atgaatatat ggcccgagta caagaaccgg accatctttg atatcactaa taacctctcc 300
 attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctggag 360
 tatgaaaaag atgctttcaa gcgagaacac ctggctgaag tgatgttatc cgtcaaagct 420
 gacttcccta cacctagtat atctgacttt gaaattccac cttctaacat tagaaggata 480
 atttgctcaa cctccggagg ttttctgag cctcacctct cctggctgga aaatggagaa 540
 gaattaaatg ccatcaacac aacagcttcc caagatcctg gaactgagct ctatactgtt 600
 agcagcaaac tggatttcaa tatgacaacc aaccacagct tcatgtgtct catcaagtat 660
 ggacatttaa gagtgaatca gaccttcaac tgggaatacac ccaagcaaga gcattttcct 720
 gataacctgc tcccatcctg ggccattacc ttaatctcag taaatggaat ttttgtgata 780
 tgctgcctga cccactgttt tgccccaaga tgcagagaga gaaggaggaa tgagagattg 840
 agaagggaag gtgcacgccc tgtatga 867

<210> 144
<211> 868
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 144
atgggctaca cacggaggca gggaacatca ccatccaagt gtccgtacct caagttcttt 60
cagctcttgg tgctggctag tctttctcat ttctgttcag gtgttatcca cgtgaccaag 120
gaagtgaaag aagtggcaac gctgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaaactcca tctactggca aaaggagaag aaaatgggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagta caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgaag 360
tatgaaaaag acgctttcaa gcgagaacac ctggctgaag tgatgttatc cgtcaaagct 420
gacttcccta cacctagtat aactgacttt gaaattccac cttctaacat tagaaggata 480
atttgctcaa cctccggagg ttttcctgag cctcacctct tctggctgga aaatggagaa 540
gaattaaatg ccatcaacac aacagtttcc caagatcctg aaactgagct ctatactgtt 600
agcagcaaac tggatttcaa tatgacaacc aatcgcagtt ttgtgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tgggaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccatcctg ggccattacc ttaatctcag caaatggaat ttttgtgata 780
tgctgcctga cctaccgctt tgccccaaga tgcagagaga gaaggaggaa tgagaggctg 840
agaagggaaa gtgtatgccc tgtatgag 868

<210> 145
<211> 867
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 145
atgggctaca cacggaggca gggaatatca ccatccaagt gtccatacct caagttcttt 60
cagctcttgg tgctggctag tctttccac ttctgttcag gtgttatcca cgtgaccaag 120
aaagtgaaag aagtggcaac gctgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaaactcga tccactggca aaaggagaag aaaatgggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagta caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgaatgtgt tgttctgaag 360
tatgaaaaag atgctttcaa gcgggaacac ctggctgaag tgatgttatc cgtcaaagct 420
gacttcccta cacctagtat atctgacttt gaaattccac cttctaacat tagaaggata 480
atttgctcaa cctctggagg ttttcagag cctcacctct cctggctgga aaatggagaa 540
gaattaaatg ccatcaacac aacagtttcc caagatcctg gaactgagct ctatactgtt 600
agcagcaaac tggatttcaa tatgacaacc gatcgcagtt ttgtgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tgggaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccatcctg ggccattacc ctaatctcag taaatggaat ttttgtgata 780
tgctgcctga cctactgctt tgccccaaga tgcagagaga gaaggaggaa tgggagattg 840
agaagggaaa gtgtacgccc tgtatga 867

<210> 146

<211> 868
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 146

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atgagccaca cacagaggca gggaatatca ccatccaagt gtccatacct caatttcttt 60
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gaagtgaaag aagtggcaac actgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaactcgca tctactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagta caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctggag 360
tatgaaaaag acgctttcaa gcgggagcac ctactgaag tgacgttatc agtcaaagct 420
gacttccta cacctagtat aactgacttt gaaattccac cttctaacat tagaaggata 480
atttgcctaa cctctggagg ttttccagag cccacctct tctggctgga aaatggagaa 540
gaattaaatg ccatcagcac aacagtttcc caagatcctg aaactgagct ctatgctgtc 600
agcagcaaac tggatttcaa tatgacaacc aaccacagct tcatgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tgggaatacaa ccaagcaaga gcattttcct 720
gataacctgc tcccatcctg ggccattacc ttaatctcag taaatggaat ttttgtgata 780
tgctgcctga cctactgctt tgccccaaaga tgcagagaga ggagaaggaa tgagagattg 840
agaagggaaa gtgtacaccc tgtatgag                                     868
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<210> 147
<211> 867
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 147

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atggggccaca cacggaggca gggaacatca ccatccaagt gtccatacct caagttcttt 60
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gaagtgaaag aagtggcaac actgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaactcgca tctactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagta caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctggag 360
tatgaaaaag acgctttcaa gcgggaacac ctactgaag tgacgttatc agtcaaagct 420
gacttccta cacctagtat atctgacttt gaaattccga cttctaatat tagaaggata 480
atttgcctaa cctctggagg ttttccagag cctcacctct tctggctgga aaatggagaa 540
gaattaaatg ccatcaacac aacagtttcc caagatcctg aaactgagct ctatactgtt 600
agcagcaaac tggatttcaa tatgacagcc aatcacagtt ttgtgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tgggaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccatcctg ggccattacc ttaatctcag taaatggaat ttttgtgata 780
tgctgcctga cctactgctt tgccccagga tgcagagaga gaaggaggaa tgagagattg 840
agaagggaaa gtgtatgccc tgtatag                                     867
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<210> 148
<211> 867
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 148

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gaagtgaag aagtggcaac actgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaaactcgca tctactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagta caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatccgac gagggcacat acgagtgtgt tgttctgaag 360
tatgaaaaag acgctttcaa gcgggaacac ctggctgaag tgacgttatc agtcaaagct 420
gacttcccta cacctagtat atctgacttt gaaattccac cttctaacat tagaaggata 480
atgtgtctca cctctggagg ttttccagag cctcgcctcg cctggatgga agatggagaa 540
gaactaaatg ccatcaacac aacagcttcc caagatcctg aaactgagct ctatactggt 600
agcagcaaac tggatttcaa tatgacaacc aatcgcagtt ttgtgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tggaatacac ccaagcaaga gcattttcct 720
gataacctgt tcccatacctg ggccattacc ctaatctcag taaatggaat ttttgtgata 780
tgctgcctga cctactgctt tgccccaaga tgcagagaga gaaggaggaa tgagagattg 840
agaagggaaa gtgtacgcc tgtatga 867
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<210> 149

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 149

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cagctcttgg tgctggctag tctttctcac ttctgttcag gtgttatcca catgaccaag 120
gaagtgaag aagtggcaac gctgtcctgt ggtcccaatg tttccgttga agagctggca 180
caaaactcgca tctactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagta caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgaag 360
tatgaaaaag atgctttcaa gcgagaacac ctggctgaag tgacgttatc agtcaaagct 420
gacttcccta cacctagtat atctgacttt gaaattccaa cttctaacat tagaaggata 480
atgtgtctca cctctggagg ttttctgag cctcacctct cctggctgga aaatggagaa 540
gaattaaatg ccatcaacac aacagtttcc caagatcctg gaactgagct ctatactggt 600
agcagcaaac tggatttcaa tatgacaacc aaccacagct tcatgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tggaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccatacctg ggccattacc ttaatctcag taaatggaat ttttgtgata 780
tgctgcctga cccactgttt tgccccaaga tgcagagaga gaaggaggaa tgagagattg 840
agaagggaaa gtgtatgcc tgtatga 867
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<210> 150

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

nucleotide sequence

<400> 150

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atgagccaca cacggaggca gggaatatca tcatccaagt gtccatacct caagttcttt 60
cagctcttgg tgctggcttg tctttctcat ttctgttcag gtgttatcca cgtgaccaag 120
aaagtgaag aagtggcaac actgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaactcgca tctactggca aaaggggaag aaaatggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagagt caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgc tgttctgaag 360
tatgaaaaag acgctttcaa gcgggaacac ctagctgaag tgacgttatc agtcaaagct 420
gacttcccta cacctagtat atctgacttt gaaattccaa cttctaatat tagaaggata 480
atttgcctaa cctctggagg ttttcagag cctcacctct tctggttgga aaatggggaa 540
gaattaaatg ccatcaacac aacagcttcc caagatcctg aaactgagct ctatgctgtt 600
agcagcaaac tggatttcaa tatgacaacc aaccacagct tcatgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tgggaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccactctg ggccattacc ttaatctcag taaatggaat ttttgtgata 780
tgctgcctga cctactgctt tgccccaaga tgcagagaga gaaagagcaa tgagagactg 840
agaagggaag gtgtacgccc tgtatga
867

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<210> 151

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 151

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gaagtgaag aagtggcaac actgtcctgt ggtctcaatg tttctgttga agagctggca 180
caaactcgca tccactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagagt caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgaag 360
tatgaaaaag atgccttcaa gcgggaacac ctggctgaag tgatgttatc agtcaaagct 420
gacttcccta cacctagtat atctgacttt gaaattccac cttctaacat tagaaggata 480
atttgcctaa cctctggagg ttttcctgag cctcacctct cctggctgga aaatggagaa 540
gaattaaatg ccatcaacac aacagtttcc caagatcctg aaactgggct ctatactgtt 600
agcagcaaac tggatttcaa tatgacaacc aaccacagct tcatgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tgggaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccactctg ggccattacc ctaatctcag taaatggaat ttttgtgata 780
tgctgcctga cctactgctt tgccccaaga tgcagagaga gaaggaggaa tgagagactg 840
agaagggaag gtgtacgccc tgtatga
867

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<210> 152

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 152

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atgagccaca cacggaggca gggaatatca ccatccaagt gtccatacct caatttcttt 60
cggctcttgg tgctggctag tcttttctcat ttctgttcag gtgttatcca cgtgaccaag 120
gaagtgaaag aagtggcaac actgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaactcgca tccactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagta caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgaag 360
tatgaaaaag acgctttcaa gcgagaacac ctagctgaag tgacgttatc agtcaaagct 420
gacttccta cacctagtat aactgacttt gaaattccac cttctaacat tagaaggata 480
atttgctcaa cctctggagg ttttccagag cctcacctct cctggctgga aaatggagaa 540
gaattaaatg ccatcaacac aacagtttcc caagatcctg gaactgagct ctatactgtt 600
agcagcaaac tggatttcaa tatgacagcc aatcacagtt ttgtgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tggaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccatcctg ggccattacc ttaatctcag caaatggaat ttttgtgata 780
tgctgcctga cctactgctt tgccccaaga tgcagagaga gaaggaggaa tgagagattg 840
agaagggaaa gtgtacgccc tgtatga
867

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<210> 153

<211> 901

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<220>

<221> modified_base

<222> (893)..(894)

<223> A, T, C, G, other or unknown

<400> 153

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cagctcttgg tgctggctag tcttttctcat ttctgttcag gtgttatcca cgtgaccaag 120
gaagtgaaag aagtggcaac gctgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaactcgca tctactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagta caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgaag 360
tatgaaaaag acgctttcaa gcgggaacac ctggctgaag tgatgttatc cgtcaaagct 420
gacttccta cacctagtat atctgacttt gaaattccac cttctaacat tagaaggata 480
atttgctcaa cctccggagg ttttctgag cctcacctct cctggctgga aaatggagaa 540
gaattaaatg ccatcaacac aacagtttcc caagatcctg aaactgagct ctatactggt 600
agcagcaaac tggatttcaa tatgacaacc aaccacagct tcatgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcagc tggaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccatcctg ggccattacc ctaatctcag caaatggaat ttttgtgata 780
tgctgcctga cctactgctt tgccccaaga tgcagagaga gaaggaggaa tgagaccctg 840
agaagggaaa gtgtacgccc tgtatggggt accaagctta agtttaaacc gcnnatcagc 900
c
901

```

<210> 154

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

nucleotide sequence

<400> 154

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cagctcttgg tgctggctag tctttctcat ttctgttcag gtgttatcca cgtgactaag 120
gaagtgaaag aagtggcaac gctgtcctgt ggtctcaatg tttctgttga agagctggca 180
caaactcgca tctactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagca caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgaag 360
tatgaaaaag acgctttcaa gcgggaacac ctactgaag tgacgttatc agtcaaagct 420
gacttcctta cacctagtat aactgacctt gaaattccac cttctaacat tagaaggata 480
atttgcctaa cctccggagg ttttctgag cctcacctct tctggctgga aaatggagaa 540
gaattaaacg ccatcaacac aacagcttcc caagatcctg aaactgagct ctatactgtt 600
agcagcaaac tggatttcaa tatgacagcc aatcacagtt ttgtgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tggaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccatcctg ggccattacc ttaatctcag taaatggaat ttttgtgata 780
tgctgcctga cctactgctt tgccccaaga tgcagagaga ggagaaggaa tgagacactg 840
agaagggaaa gtgtacgccc tgtatga
867

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<210> 155

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 155

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cagctcttgg tgctagctag tctttctcac ttctgttcag gtgttatcca cgtgaccaag 120
gaagtgaaag aagtggcaac gctgtcctgt ggtcacaatg ttctgttga agagctggca 180
caaactcgca tctactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagta caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgggtgtgt tgttctggag 360
tatgaaaaag acgctttcaa gcgagaacac ctggctgaag tgatgttatc cgtcaaagct 420
gacttcctta cacctagtat aactgacctt gaaattccac cttctaacat tagaaggata 480
atttgcctaa cctctggagg ttttccagag cctcacctct tctggttgga aaatggggaa 540
gaattaaatg ccatcaacac aacagcttcc caagatcctg aaactgagct ctatgctgtt 600
agcagcaaac tggatttcaa tatgacaacc aaccacagct tcatgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tggaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccatcctg ggccattacc ttaatctcag caaatggaat ttttgtgata 780
tgctgcctga cttactgctt tgccccaaga tgcagagaga gaaggaggaa tgagagattg 840
agaagggaaa gtgtacaccc tgtatga
867

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<210> 156

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 156


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cagctcttgg tgctggcttg tctttctcat ttctgttcag gtgttatcca cgtgaccaag 120
gaagtgaag aggtggcaac gctgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaactcgca tctactggca aaaggataag aaaatggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagta caagaaccag accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgaag 360
tatgaaaaag atgctttcaa gcaggaacac ctggctgaag tgatgttatc cgtcaaagct 420
gacttcccta cacctagtat atctgacttt gaaattccac cttctaacad tagaaggata 480
atttgctcaa cctctggagg ttttccagag cctcgctcgc cctggatgga agatggagaa 540
gaactaaatg ccatcagcac aacagtttcc caagatcctg gaactgagct ctgtactgtt 600
agcagcaaac tggatttcaa tatgacaacc aaccacagct tcatgtgtct catcaggat 660
ggacatttaa gagtgaatca gaccttcaac tgaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccatcctg ggccattacc ttaatctcag taaagggaat ttttgtgata 780
tgctgcctga cctactgctt tgccccaaga ggcagagaga gaaagagcaa tgggagactg 840
agaagggaaa gtgtacaccc tgtatga 867

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<210> 157

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<220>

<221> modified_base

<222> (599)

<223> A, T, C, G, other or unknown

<400> 157

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caaactcgca tccactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagta caagaaccgg accatctttg atatcactaa taacctctcc 300
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gacttcccta cacctagtat atctgacttt gaaattccac cttctaacad tagaaggata 480
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ggacatttaa gagtgaatca gaccttcaac tgaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccatcctg ggccattacc ctaatctcgg taaatggaat ttttgtgata 780
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<210> 158

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 158

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gaagtgaaag aagtggcaac gctgtcctgt ggtcacaatg tttctgttga agagctggca 180
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gacttcccta cacctagtat atctgacttt gaaattccac cttctaacat tagaaggata 480
atttgcctaa cctctggagg ttttctgag cctcacctct cctggctgga aaatggagaa 540
gaattaaatg ccatcaaac aacagtttcc caagatcctg gaactgagct ctatactgtt 600
agcagcaaac tggatttcaa tatgacaacc aaccacagct tcatgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tggaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccactctg ggccattacc ttaatctcag taaatggaat ttttgtgata 780
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agaagggaaa gtgtatgccc tgtatga 867
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<210> 159

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 159

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gaagtgaaag aagtggcaac actgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaactcgca tccactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240
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gacttcccta cacctagtat atctgacttt gaaattccac cttctaacat tagaaggata 480
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gataacctgc tcccactctg ggccattacc ctaatctcag taaatggaat ttttgtgata 780
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agaagggaaa gtgtacgccc tgtatga 867
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<210> 160

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 160

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caaactcgca tccactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240
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gttgatgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgaag 360
tatgaaaaag acgctttcaa gcgggaacac ctggctgaag tgacgttatc agtcaaagct 420
gacttcccta cacctagtat aactgacttt gaaattccac cttctaacat tagaaggata 480
atttgctcaa cctctggagg ttttccagag cctcacctct cctggctgga aaatggagaa 540
gaattaaatg ccatcaacac aacagtttcc caagatcctg gaactgagct ctatactgtt 600
agcagcaaac tggattttcaa tatgacaacc aatcgagtt ttgtgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tggaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccatcctg ggccattacc ctaatctcag taaatggaat ttttgtgata 780
tgctgcctga cctactgctt tgccccaaga tgcagagaga gaaagagcaa tgagagactg 840
agaagggaaa gtgtacgccc tgtatga
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<210> 161

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 161

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atgggctaca cacggaggca gggaatatca ccatccaagt gtccatacct caagttcttt 60
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gaagtgaaag aagtggcaac gctgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaactcgca tccactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagta caagaaccgg accatctttg atatcactaa taacctctcc 300
atttgatgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgaag 360
tatgaaaaag atgctttcaa gcgggaacac ctggctgaag tgatgttatc cgtcaaagct 420
gacttcccta cacctagtat aactgacttt gaaattccac cttctaacat tagaaggata 480
atttgctcaa cctctggagg ttttccagag cctcgctcctg cctggatgga agatggagaa 540
gaattaaatg ccatcaacac aacagtttcc caagatcctg gaactgagct ctatgctgtt 600
agcagcaaac tggattttta tatgacaacc aaccacagct tcatgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tggaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccatcctg ggccattacc ttaatctcag taaatggaat ttctgtgata 780
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agaagggaaa gtgtatgccc tgtatga
867

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<210> 162

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 162

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atgagccaca cacggaggca gggaatatca ccatccaagt gtccatacct caagttcttt 60
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gaagtgaaag aagtggcaac gctgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaactcgca tctactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240

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```

atgaatatat ggccccgagta caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctggag 360
tatgaaaaag atgctttcaa gcgggaacac ctggctgaag tgatgttatc cgtcaaagct 420
gacttcccta cacctagtat aactgacttt gaaattccaa cttctaacat tagaaggata 480
atttgc tcaa cctctggagg ttttccagag cctcgccctg cctggatgga agatggagaa 540
gaactaaatg ccatcagcac aacagcttcc caagatcctg aaactgagct ctatactgtt 600
agcagcaaac tggatttcaa tatgacaact aaccacagct tcatgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tggaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccatcctg ggccattacc ctaatctcag taaatggaat ttttgtgata 780
tgctgcctga cccactgttt tgccccaaaga tgcagagaga gaaggaggaa tgagagattg 840
agaagggaaa gtgtatgccc tgtatga
867

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<210> 163

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 163

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atggggccaca cacggaggca gggaatatca ccatccaagt gtccatacct caagttcttt 60
cagctcttgg tgctggctgg tctttctcac ttctgttcag gtgttatcca cgtgaccaag 120
gaagtgaag aagtggcaac gctgtcctgt ggtctcaatg tttctgttga agagctggca 180
caaactcgca tccactggca aaaggagaag aaaatgggtg tgactatgat gtctggggac 240
atgaatatat ggccccgagta caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgaag 360
tatgaaaaag acgctttcaa gcgggaacac ctggctgaag tgatgttatc cgtcaaagct 420
gacttcccta cacctagtat aactgacttt gaaattccac cttctaacat tagaaggata 480
atttgc tcaa cctctggagg ttttctgag cctcacctct cctggctgga aaatggagaa 540
gaattaaatg ccatcaacac aacagtttcc caagatcctg gaactgagct ctatactgtt 600
agcagcaaac tggatttcaa tatgacaacc aaccacagct tcatgtgtct catcaagtat 660
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gataacctgc tcccatcctg ggccattacc ttaatctcag caaatggaat ttttgtgata 780
tgctgcctga cctactgctt tgccccaaaga tgcagagaga gaaagagcaa tgagagactg 840
agaagggaaa gtgtatgccc tgtatga
867

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<210> 164

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 164

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atggggctaca cacggaggca gggaatatca ccatccaagt gtccatacct caagttcttt 60
cagctcttgg tgctggcttg tctttctcat ttctgttcag gtgttatcca cgtgaccaag 120
gaagtgaag aagtggcaac actgtcctgt ggtcacaatg tttctgatga agagctggca 180
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attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgaag 360
tatgaaaaag atgctttcaa gcgagaacac ctggctgaag tgacgttatc agtcaaagct 420

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gacttccta cacctagtat atctgacttt gaaattccac cttctaacat tagaaggata 480
atttgctcaa cctctggagg ttttctgag cctcacctct cctggctgga aaatgggaa 540
gaattaaatg ccatcaacac aacagtttcc caagatcctg gaactgagct ctatactgtt 600
agcagcaaac tggatttcaa tatgacaacc aaccacagct tcatgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tgggaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccatccta ggccattacc ttaatctcag caaatggaat ttttgtgata 780
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agaagggaaa gtatacacc tgtatga
867

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<210> 165

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 165

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gaagtgaag aagtggcaac gctgccctgt ggtcacaatg tttctgttga agagctggca 180
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tatgaaaaag atgctttcaa gcgggaacac ctggctgaag tgatgttatc cgtcaaagct 420
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gaattaaatg ccatcaacac aacagtttcc caagatcctg gaactgagct ctatgtgtt 600
agcagcaaac tggatttcaa tatgacaacc aaccacaact tcatgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tgggaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccatcctg ggccattacc ttaatctcag taaatggaat ttttgtgata 780
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agaagggaaa gtgtacgccc tgtatga
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<210> 166

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 166

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gaagtgaag aagtggcaac actgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaactcgca tctactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240
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gaattaaatg ccatcaacac aacagtttcc caagatcctg aaactgagct ctatactgtt 600

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agcagcaaac tggatttcaa tatgacagcc aaccacagct tcatgtgtct catcaagtat 660
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gataacctgc tcccatcctg ggccattacc ttaatctcag taaatggaat ttttgtgata 780
tgctgcctga cctactgctt tgccccaaga tgcagagaga gaaggaggaa tgagagattg 840
agaagggaag gtgtatgccc tgtatga
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<210> 167

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 167

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gaagtgaag aagtggcaac actgtcctgt ggtcacaatg tttctgttga agagctggca 180
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gacttccta cacctagtat atctgacttt gaaattccaa cttctaacat tagaaggata 480
atttgctcaa cctctggagg ttttccagag cctcacctct tctggctgga aaatggggaa 540
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gataacctac tcccatcctg ggccattacc ttaatctcag taaatggaat tttcgtgata 780
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867

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<210> 168

<211> 867

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 168

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gaagtgaag aagtggcaac gctgtcctgt ggtcacaatg tttctgttga agagctggca 180
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aataacctgc tcccatcctg ggccattacc ttaatctcag taaatggaat ttttgtgata 780

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tgctgcctga cctactgctt tgccccaaga tgcagagaga ggagaaggaa tgagacactg 840
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<210> 169
<211> 867
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 169
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gaagtgaag aagtggcaac gctgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaaactcgca tctactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagca caagaaccgg accatctttg atatcactaa taacctctcc 300
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atttgctcaa cctctggagg ttttccagag cctcacctct cctggctgga aaatggagaa 540
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agcagcaaac tggatttcaa tatgacaacc aatcgcagtt ttgtgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tgggaatacac ccaagcaaga gcattttcct 720
gataacctgc tccatcctg ggccattacc ttaatctcag taaatggaat ttttgtgata 780
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<210> 170
<211> 867
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 170
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gaagtgaag aagtggcaac gctgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaaactcgca tctactggca aaaggagaag aaaatggtgc tgactatgat gcctggggac 240
atgaatatat ggcccagta caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgagg 360
tatgaaaaag atgctttcaa gcgggaacac ctggctgaag tgacgttatc agtcaaagct 420
gacttcccta cacctagtat atctgacttt gaaattccaa cttctaata tagaaggata 480
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gaattaaatg ccatcaacac aacagtttcc caagatcctg aaactgagct ctatactgtt 600
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ggacatttaa gagtgaatca gaccttcaac tgggaatacac ccaagcaaga gcattttcct 720
gataacctgc tccatcctg ggccattacc ttaatctcag caaatggaat ttttgtgata 780
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agaagggaaa gtgtacgccc tgtatag 867

<210> 171
<211> 867
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 171
atgagccaca cacggaggca gggaatatca ccatccaagt gtccgtacct caagttcttt 60
cagctcttgg tgctggctgg tctttctcat ttctgttcag gtgttatcca cgtgactaag 120
gaagtgaag aagtggcaac actgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaaactcgca tccactggca aaaggagaag aaaatgggtgc tgactatgat gtctgggggc 240
atgaatatat ggcccagta caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgaag 360
tatgaaaaag acgctttcaa gcgggaacac ctactgaag tgacgttatc agtcaaagct 420
gacttcccta cacctagtat atctgacttt gaaattccaa cttctaatat tagaaggata 480
atttgctcaa cctctggagg ttttccagag cctcacctct cctggctgga aaatggagaa 540
gaattaaatg ccatcagcac aacagtttcc caagatcctg gaactgagct ctatgctgtt 600
agcagcaaac tggatttcaa tatgacaacc aatcgcagtt ttgtgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tgggaatacaa ccaagcaaga gcattttcct 720
gataacctgc tcccatcctg ggccattacc ctaatctcag taaatggaat ttttgtgata 780
tgctgcctga cctactgctt tgccccaaga tgcagagaga gaaggaggaa tgagagattg 840
agaagggaaa gtgtacgccc tgtatag 867

<210> 172
<211> 867
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 172
atgggctaca cacggaggca gggaacatca ccatccaagt gtccatacct caagttcttt 60
cagctcttgg tgctggcttg tctttctcat ttctgttcag gtgttatcca cgtgactaag 120
gaagtgaag aagtggcaac actgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaaactcgca tctactggca aaaggagaag aaaatgggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagta caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctggag 360
tatgaaaaag acgctttcaa gcgggaacac ctggctgaag tgatgttatc cgtcaaagct 420
gacttcccta cacctagtat atctgacttt gaaattccac cttctaacat tagaaggata 480
atttgctcaa cctctggagg ttttctgag cctcacctct cctggctgga aaatggagaa 540
gaattaaatg ccatcaacac aacagtttcc caagatcctg gaactgagct ctatgctgtt 600
agcagcaaac tggatttcaa tatgacaacc aaccacagct tcatgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tgggaatacac ccaagcaaga gcattttcct 720
gataacctgc tcccatcctg ggccattacc ctaatctcag taaatggaat ttttgtgata 780
tgctgcctgg cctactgctt tgccccaaga tgcagaggga gaaggaggaa tgagagattg 840
agaagggaaa gtgtacgccc tgtatga 867

<210> 173
<211> 867

<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 173
atgggccaca cacggaggca gggaacatca ccatccaagt gtccgtacct caattttcttt 60
cagctcttgg tgctggcttg tctttctcac ttctgttcag gtgttatcca cgtgactaag 120
gaagtgaaag aagtggcaac gctgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaaactcgca tctactggca aaaggagaag aaaatgggtc tgactatgat gtctggggac 240
atgaatatat ggcccagta caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgaag 360
tatgaaaaag atgctttcaa gcgagaacac ctggctgaag tgatgttatc cgtcaaagct 420
gacttcccta cacctagtat atctgacttt gaaattccac cttctaacat tagaaggata 480
atttgctcaa cccctggagg ttttccagag cctcgctcg cctggatgga agatggggaa 540
gaactaaatg ccatcagcac aacagtttcc caagatcctg gaactgagct ctatgctgtt 600
agcagcaaac tggatttcaa tatgacaacc aaccacagct tcatgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tggaatacaa ccaagcaaga gcattttcct 720
gataacctgc tcccatcctg ggccattacc ctaatctcag taaagggaa ttttgtgata 780
tgctgcctga cctactgctt tgccccaaga tggagagaga gaaagagcaa tgagagactg 840
agaagggaaa gtgtacgcc tgtatag 867

<210> 174
<211> 303
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
peptide

<220>
<221> MOD_RES
<222> (75)
<223> Variable amino acid

<400> 174
Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15
Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30
Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45
Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60
Arg Ile Tyr Trp Arg Lys Asp Ser Lys Met Xaa Leu Ala Ile Leu Pro
65 70 75 80
Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
85 90 95

Met	Asn	Asp	Asn	Leu	Arg	Ile	Val	Ile	Leu	Ala	Leu	Arg	Leu	Ser	Asp	100	105	110
Ser	Gly	Thr	Tyr	Thr	Cys	Val	Ile	Gln	Lys	Pro	Asp	Leu	Lys	Gly	Ala	115	120	125
Tyr	Lys	Leu	Glu	His	Leu	Thr	Ser	Val	Arg	Leu	Met	Ile	Arg	Ala	Asp	130	135	140
Phe	Pro	Val	Pro	Thr	Ile	Asn	Asp	Leu	Gly	Asn	Pro	Ser	Pro	Asn	Ile	145	150	155
Arg	Arg	Leu	Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Arg	Pro	His	Leu	165	170	175
Tyr	Trp	Leu	Glu	Asn	Gly	Glu	Glu	Leu	Asn	Ala	Thr	Asn	Thr	Thr	Val	180	185	190
Ser	Gln	Asp	Pro	Gly	Thr	Glu	Leu	Tyr	Met	Ile	Ser	Ser	Glu	Leu	Asp	195	200	205
Phe	Asn	Val	Thr	Asn	Asn	His	Ser	Ile	Val	Cys	Leu	Ile	Lys	Tyr	Gly	210	215	220
Glu	Leu	Leu	Val	Ser	Gln	Ile	Phe	Pro	Trp	Ser	Lys	Pro	Lys	Gln	Glu	225	230	235
Pro	Pro	Ile	Asp	Gln	Leu	Pro	Phe	Trp	Val	Ile	Ile	Pro	Val	Ser	Gly	245	250	255
Ala	Leu	Val	Leu	Thr	Ala	Val	Val	Leu	Tyr	Cys	Leu	Ala	Cys	Arg	His	260	265	270
Val	Ala	Arg	Trp	Lys	Arg	Thr	Arg	Arg	Asn	Glu	Glu	Thr	Val	Gly	Thr	275	280	285
Glu	Arg	Leu	Ser	Pro	Ile	Tyr	Leu	Gly	Ser	Ala	Gln	Ser	Ser	Gly		290	295	300

<210> 175

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 175

Met	Gly	His	Thr	Met	Lys	Trp	Gly	Ser	Leu	Pro	Pro	Lys	Cys	Pro	Cys	1	5	10	15
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	---	---	----	----

Leu	Trp	Leu	Ser	Gln	Leu	Leu	Val	Leu	Thr	Gly	Leu	Phe	Tyr	Phe	Cys	20	25	30
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	----	----	----

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
 35 40 45
 Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
 50 55 60
 Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
 65 70 75 80
 Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
 85 90 95
 Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
 100 105 110
 Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
 115 120 125
 Tyr Lys Leu Glu His Leu Thr Ser Val Arg Leu Met Ile Arg Ala Asp
 130 135 140
 Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
 145 150 155 160
 Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
 165 170 175
 Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Leu
 180 185 190
 Ser Gln Asp Pro Glu Thr Lys Leu Tyr Met Ile Ser Ser Glu Leu Asp
 195 200 205
 Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
 210 215 220
 Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
 225 230 235 240
 Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
 245 250 255
 Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
 260 265 270
 Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
 275 280 285
 Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<210> 176
 <211> 310
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<220>

<221> MOD_RES

<222> (310)

<223> Variable amino acid

<400> 176

Met	Gly	His	Thr	Met	Lys	Trp	Gly	Ser	Leu	Pro	Pro	Lys	Arg	Pro	Cys	
1				5					10					15		
Leu	Trp	Leu	Ser	Gln	Leu	Leu	Val	Leu	Thr	Gly	Leu	Phe	Tyr	Phe	Cys	
			20					25					30			
Ser	Gly	Ile	Thr	Pro	Lys	Ser	Val	Thr	Lys	Arg	Val	Lys	Glu	Thr	Val	
		35					40					45				
Met	Leu	Ser	Cys	Asp	Tyr	Asn	Thr	Ser	Thr	Glu	Lys	Leu	Thr	Ser	Leu	
	50					55					60					
Arg	Ile	Tyr	Trp	Gln	Lys	Asp	Ser	Lys	Met	Val	Leu	Ala	Ile	Leu	Pro	
65					70					75					80	
Gly	Lys	Val	Gln	Val	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Thr	Asp	
			85						90					95		
Met	Asn	Asp	Asn	Pro	Arg	Ile	Val	Ile	Leu	Ala	Leu	Arg	Leu	Ser	Asp	
		100						105					110			
Ser	Gly	Thr	Tyr	Thr	Cys	Val	Ile	Gln	Lys	Pro	Val	Leu	Lys	Gly	Ala	
		115					120					125				
Tyr	Lys	Leu	Glu	His	Leu	Thr	Ser	Val	Arg	Leu	Met	Ile	Arg	Ala	Asp	
	130					135					140					
Phe	Pro	Val	Pro	Thr	Ile	Asn	Asp	Leu	Gly	Asn	Pro	Ser	Pro	Asn	Ile	
145					150					155					160	
Arg	Arg	Leu	Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Arg	Pro	His	Leu	
			165						170					175		
Tyr	Trp	Leu	Glu	Asn	Gly	Glu	Glu	Leu	Asn	Ala	Thr	Asn	Thr	Thr	Val	
		180						185					190			
Ser	Gln	Asp	Pro	Glu	Thr	Lys	Leu	Tyr	Met	Ile	Ser	Ser	Glu	Leu	Asp	
		195					200					205				
Phe	Asn	Val	Thr	Asn	Asn	His	Ser	Ile	Val	Cys	Leu	Ile	Lys	Tyr	Gly	
	210					215					220					
Glu	Leu	Ser	Val	Ser	Gln	Ile	Phe	Pro	Trp	Ser	Lys	Pro	Lys	Gln	Glu	
225					230					235					240	
Pro	Pro	Ile	Asp	Gln	Leu	Pro	Phe	Trp	Val	Ile	Ile	Pro	Val	Ser	Gly	
			245						250					255		

Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Pro Ala Cys Arg His
260 265 270

Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
275 280 285

Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Arg Ala Glu
290 295 300

Val Pro Ser Leu Ser Xaa
305 310

<210> 177

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 177

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
100 105 110

Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
115 120 125

Tyr Lys Leu Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp
130 135 140

Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
145 150 155 160

Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
165 170 175

Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Val
 180 185 190
 Ser Gln Asp Pro Gly Thr Glu Leu Tyr Met Ile Ser Ser Glu Leu Asp
 195 200 205
 Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
 210 215 220
 Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
 225 230 235 240
 Pro Pro Ile Asp Gln Leu Pro Phe Leu Val Ile Ile Pro Val Ser Gly
 245 250 255
 Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
 260 265 270
 Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
 275 280 285
 Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<210> 178

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 178

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
 1 5 10 15

Leu Trp Leu Pro Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
 20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
 35 40 45

Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
 50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
 65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
 85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
 100 105 110

Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala

115	120	125
Tyr Lys Leu Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp		
130	135	140
Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile		
145	150	155
		160
Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu		
	165	170
		175
Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Val		
	180	185
		190
Ser Gln Asp Pro Glu Thr Lys Leu Tyr Met Ile Ser Ser Glu Leu Asp		
	195	200
		205
Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly		
	210	215
		220
Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu		
	225	230
		235
		240
Pro Pro Ile Asp Gln Leu Pro Phe Arg Val Ile Ile Pro Val Ser Gly		
	245	250
		255
Ala Leu Val Leu Thr Ala Ile Val Leu Tyr Cys Leu Ala Cys Arg His		
	260	265
		270
Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr		
	275	280
		285
Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly		
	290	295
		300

<210> 179

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 179

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
 65 70 75 80
 Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
 85 90 95
 Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
 100 105 110
 Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
 115 120 125
 Tyr Lys Leu Glu His Leu Thr Ser Val Arg Leu Met Ile Arg Ala Asp
 130 135 140
 Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
 145 150 155 160
 Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
 165 170 175
 Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Val
 180 185 190
 Ser Gln Asp Pro Gly Thr Glu Leu Tyr Met Ile Ser Ser Glu Leu Asp
 195 200 205
 Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
 210 215 220
 Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
 225 230 235 240
 Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
 245 250 255
 Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
 260 265 270
 Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
 275 280 285
 Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<210> 180

<211> 302

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 180

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
 1 5 10 15
 Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
 20 25 30
 Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
 35 40 45
 Met Pro Ser Cys Asp Tyr Ser Thr Ser Thr Glu Glu Leu Thr Ser Leu
 50 55 60
 Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
 65 70 75 80
 Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
 85 90 95
 Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
 100 105 110
 Ser Gly Thr Tyr Thr Cys Val Val Gln Lys Asn Glu Asn Gly Ser Phe
 115 120 125
 Arg Arg Glu His Leu Thr Ser Val Thr Leu Ser Ile Arg Ala Asp Phe
 130 135 140
 Pro Val Pro Ser Ile Thr Asp Ile Gly His Pro Ala Pro Asn Val Lys
 145 150 155 160
 Arg Ile Arg Cys Ser Ala Ser Gly Gly Phe Pro Glu Pro Arg Leu Ala
 165 170 175
 Trp Met Glu Asp Gly Glu Glu Leu Asn Ala Val Asn Thr Thr Val Asp
 180 185 190
 Gln Asp Leu Asp Thr Glu Leu Tyr Ser Val Ser Ser Glu Leu Asp Phe
 195 200 205
 Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly Glu
 210 215 220
 Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu Pro
 225 230 235 240
 Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly Ala
 245 250 255
 Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His Val
 260 265 270
 Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr Glu
 275 280 285
 Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<210> 181
<211> 303
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 181

Met	Gly	His	Thr	Met	Lys	Trp	Gly	Ser	Leu	Pro	Pro	Lys	Arg	Pro	Cys	
1				5					10					15		
Leu	Trp	Leu	Ser	Gln	Leu	Leu	Val	Leu	Thr	Gly	Leu	Phe	Tyr	Phe	Cys	
		20						25					30			
Ser	Gly	Ile	Thr	Pro	Lys	Ser	Val	Thr	Lys	Arg	Val	Lys	Glu	Thr	Val	
		35					40					45				
Met	Leu	Ser	Cys	Asp	Tyr	Asn	Thr	Ser	Thr	Glu	Glu	Leu	Thr	Ser	Leu	
	50					55					60					
Arg	Ile	Tyr	Trp	Gln	Lys	Asp	Ser	Lys	Met	Val	Leu	Ala	Ile	Leu	Pro	
65					70					75					80	
Gly	Lys	Val	Gln	Val	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Thr	Asp	
			85						90					95		
Met	Asn	Asp	Asn	Pro	Arg	Ile	Val	Ile	Leu	Ala	Leu	Arg	Leu	Ser	Asp	
		100					105						110			
Lys	Gly	Thr	Tyr	Thr	Cys	Val	Ile	Gln	Lys	Pro	Val	Leu	Lys	Gly	Ala	
		115					120					125				
Tyr	Lys	Leu	Glu	His	Leu	Ala	Ser	Val	Arg	Leu	Met	Ile	Arg	Ala	Asp	
	130					135					140					
Phe	Pro	Val	Pro	Thr	Ile	Asn	Asp	Leu	Gly	Asn	Pro	Ser	Pro	Asn	Ile	
145					150					155					160	
Arg	Arg	Leu	Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Arg	Pro	His	Leu	
			165						170					175		
Tyr	Trp	Leu	Glu	Asn	Gly	Glu	Glu	Leu	Asn	Ala	Thr	Asn	Thr	Thr	Val	
		180						185					190			
Ser	Gln	Asp	Pro	Gly	Thr	Glu	Leu	Tyr	Met	Ile	Ser	Ser	Glu	Leu	Asp	
		195					200					205				
Phe	Asn	Val	Thr	Asn	Asn	His	Ser	Ile	Val	Cys	Leu	Ile	Lys	Tyr	Gly	
	210					215					220					
Glu	Leu	Ser	Val	Ser	Gln	Ile	Phe	Pro	Trp	Ser	Lys	Pro	Lys	Gln	Glu	
225					230					235					240	
Pro	Pro	Ile	Asp	Gln	Leu	Pro	Phe	Trp	Val	Ile	Ile	Pro	Val	Ser	Gly	

245	250	255
Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His		
260	265	270
Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr		
275	280	285
Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly		
290	295	300

<210> 182
 <211> 296
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic peptide

 <400> 182

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys			
1	5	10	15
Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys			
20	25	30	
Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val			
35	40	45	
Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu			
50	55	60	
Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro			
65	70	75	80
Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp			
85	90	95	
Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp			
100	105	110	
Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala			
115	120	125	
Tyr Lys Leu Glu His Leu Thr Ser Val Arg Leu Met Ile Arg Ala Asp			
130	135	140	
Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile			
145	150	155	160
Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu			
165	170	175	
Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Leu			
180	185	190	

Ser Gln Asp Pro Glu Thr Lys Leu Tyr Met Ile Ser Ser Glu Leu Asp
195 200 205

Phe Asn Met Thr Ser Asn His Ser Phe Leu Cys Leu Val Lys Tyr Gly
210 215 220

Asp Leu Thr Val Ser Gln Thr Phe Tyr Trp Gln Glu Ser Lys Pro Thr
225 230 235 240

Pro Ser Ala Asn Gln His Leu Thr Trp Thr Ile Ile Ile Pro Val Ser
245 250 255

Ala Phe Gly Ile Ser Val Ile Ile Ala Val Ile Leu Thr Cys Leu Thr
260 265 270

Cys Arg Asn Ala Ala Ile Arg Arg Gln Arg Arg Glu Asn Glu Val Glu
275 280 285

Met Gln Ser Cys Ser Gln Ser Pro
290 295

<210> 183

<211> 296

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 183

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
100 105 110

Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Asp Leu Lys Gly Ala
115 120 125

Tyr Lys Leu Glu His Leu Thr Ser Val Arg Leu Met Ile Arg Ala Asp
130 135 140

Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
145 150 155 160

Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
165 170 175

Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Leu
180 185 190

Ser Gln Asp Pro Glu Thr Lys Leu Tyr Met Ile Ser Ser Glu Leu Asp
195 200 205

Phe Asn Met Thr Ser Asn His Ser Phe Leu Cys Leu Val Lys Tyr Gly
210 215 220

Asp Leu Thr Val Ser Gln Thr Phe Tyr Trp Gln Glu Ser Lys Pro Thr
225 230 235 240

Pro Ser Ala Asn Gln His Leu Thr Trp Thr Ile Ile Ile Pro Val Ser
245 250 255

Ala Phe Gly Ile Ser Val Ile Ile Ala Val Ile Leu Thr Cys Leu Thr
260 265 270

Cys Arg Asn Ala Ala Ile Arg Arg Gln Arg Arg Glu Asn Glu Val Lys
275 280 285

Met Gln Ser Cys Ser Gln Ser Pro
290 295

<210> 184

<211> 275

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 184

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Ser Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
 35 40 45
 Met Leu Ser Cys Asp Tyr Ser Thr Ser Thr Glu Glu Leu Thr Ser Leu
 50 55 60
 Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
 65 70 75 80
 Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
 85 90 95
 Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
 100 105 110
 Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
 115 120 125
 Tyr Lys Leu Glu His Leu Thr Ser Val Arg Leu Met Ile Arg Ala Asp
 130 135 140
 Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
 145 150 155 160
 Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
 165 170 175
 Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Leu
 180 185 190
 Ser Gln Asp Pro Gly Thr Glu Leu Tyr Met Ile Ser Ser Glu Leu Asp
 195 200 205
 Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
 210 215 220
 Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
 225 230 235 240
 Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
 245 250 255
 Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
 260 265 270
 Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
 275 280 285
 Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<210> 186
 <211> 303
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 186

Met	Gly	His	Thr	Met	Lys	Trp	Gly	Ser	Leu	Pro	Pro	Lys	Arg	Pro	Cys	
1				5					10					15		
Leu	Trp	Pro	Ser	Gln	Leu	Leu	Val	Leu	Thr	Gly	Leu	Phe	Tyr	Phe	Cys	
			20					25					30			
Ser	Gly	Ile	Thr	Pro	Lys	Ser	Val	Thr	Lys	Arg	Val	Lys	Glu	Thr	Val	
		35					40					45				
Met	Leu	Ser	Cys	Asp	Tyr	Asn	Thr	Ser	Thr	Glu	Glu	Leu	Thr	Ser	Leu	
	50					55					60					
Arg	Ile	Tyr	Trp	Gln	Lys	Asp	Ser	Lys	Met	Val	Leu	Ala	Ile	Leu	Pro	
65					70					75					80	
Gly	Lys	Val	Gln	Val	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Thr	Asp	
			85						90					95		
Met	Asn	Asp	Asn	Pro	Arg	Ile	Val	Ile	Leu	Ala	Leu	Arg	Leu	Ser	Asp	
			100					105					110			
Ser	Gly	Thr	Tyr	Thr	Cys	Val	Ile	Gln	Lys	Pro	Val	Leu	Lys	Gly	Ala	
		115					120					125				
Tyr	Lys	Leu	Glu	His	Leu	Thr	Ser	Val	Arg	Leu	Met	Ile	Arg	Ala	Asp	
	130					135					140					
Phe	Pro	Val	Pro	Thr	Ile	Asn	Asp	Leu	Gly	Asn	Pro	Ser	Pro	Asn	Ile	
145					150				155						160	
Arg	Arg	Leu	Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Arg	Pro	His	Leu	
			165						170					175		
Tyr	Trp	Leu	Glu	Asn	Gly	Glu	Glu	Leu	Asn	Ala	Thr	Asn	Thr	Thr	Val	
		180						185					190			
Ser	Gln	Asp	Pro	Gly	Thr	Glu	Leu	Tyr	Met	Ile	Ser	Ser	Glu	Leu	Asp	
		195					200					205				
Phe	Asn	Val	Thr	Asn	Asn	His	Ser	Ile	Ala	Cys	Leu	Ile	Lys	Tyr	Gly	
	210					215					220					
Glu	Leu	Ser	Val	Ser	Gln	Ile	Phe	Pro	Trp	Ser	Lys	Pro	Lys	Gln	Glu	
225					230					235					240	
Pro	Pro	Ile	Asp	Gln	Leu	Pro	Phe	Trp	Val	Ile	Ile	Pro	Val	Ser	Gly	
			245						250					255		
Ala	Leu	Val	Leu	Thr	Ala	Val	Val	Leu	Tyr	Cys	Leu	Ala	Cys	Arg	His	
		260						265					270			

Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
275 280 285

Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
290 295 300

<210> 187

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 187

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Ser Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
100 105 110

Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
115 120 125

Tyr Lys Leu Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp
130 135 140

Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
145 150 155 160

Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
165 170 175

Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Val
180 185 190

Ser Gln Asp Pro Gly Thr Glu Leu Tyr Met Ile Ser Ser Glu Leu Asp
195 200 205

Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly

210

215

220

Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
 225 230 235 240

Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
 245 250 255

Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
 260 265 270

Gly Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
 275 280 285

Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<210> 188

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 188

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
 1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
 20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
 35 40 45

Met Leu Ser Cys Asp Tyr Ser Thr Ser Thr Glu Glu Leu Thr Ser Leu
 50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
 65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
 85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
 100 105 110

Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Asp Leu Lys Gly Ala
 115 120 125

Tyr Lys Leu Glu His Leu Thr Ser Val Arg Leu Met Ile Arg Ala Asp
 130 135 140

Phe Pro Val Pro Ser Ile Thr Asp Ile Gly His Pro Ala Pro Asn Val
 145 150 155 160

Lys Arg Ile Arg Cys Ser Ala Ser Gly Asp Phe Pro Glu Pro Arg Leu
 165 170 175
 Ala Trp Met Glu Asp Gly Glu Glu Leu Asn Ala Val Asn Thr Thr Val
 180 185 190
 Asp Gln Asp Leu Asp Thr Glu Leu Tyr Ser Val Ser Ser Glu Leu Asp
 195 200 205
 Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
 210 215 220
 Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
 225 230 235 240
 Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
 245 250 255
 Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
 260 265 270
 Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
 275 280 285
 Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<210> 189

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 189

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
 1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
 20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
 35 40 45

Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
 50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
 65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
 85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
 100 105 110
 Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
 115 120 125
 Tyr Lys Leu Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp
 130 135 140
 Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
 145 150 155 160
 Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
 165 170 175
 Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Val
 180 185 190
 Ser Gln Asp Pro Gly Thr Glu Leu Tyr Met Ile Ser Ser Glu Leu Gly
 195 200 205
 Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
 210 215 220
 Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
 225 230 235 240
 Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
 245 250 255
 Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
 260 265 270
 Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
 275 280 285
 Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<210> 190

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<220>

<221> MOD_RES

<222> (276)

<223> Variable amino acid

<400> 190

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
 1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
 20 25 30
 Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
 35 40 45
 Met Leu Ser Cys Asp Tyr Ser Thr Ser Thr Glu Glu Leu Thr Ser Leu
 50 55 60
 Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
 65 70 75 80
 Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
 85 90 95
 Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
 100 105 110
 Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
 115 120 125
 Tyr Lys Leu Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp
 130 135 140
 Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
 145 150 155 160
 Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
 165 170 175
 Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Val
 180 185 190
 Ser Gln Asp Pro Gly Thr Glu Leu Tyr Met Ile Ser Ser Glu Leu Asp
 195 200 205
 Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
 210 215 220
 Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
 225 230 235 240
 Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
 245 250 255
 Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
 260 265 270
 Val Ala Arg Xaa Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
 275 280 285
 Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<211> 293
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 191

Met	Gly	His	Thr	Leu	Arg	Pro	Gly	Thr	Pro	Leu	Pro	Arg	Cys	Leu	His
1				5					10					15	
Leu	Lys	Leu	Cys	Leu	Leu	Leu	Ala	Leu	Ala	Gly	Leu	His	Phe	Ser	Ser
		20						25					30		
Gly	Ile	Ser	Gln	Val	Thr	Lys	Ser	Val	Lys	Glu	Met	Ala	Ala	Leu	Ser
	35					40						45			
Cys	Asp	Tyr	Asn	Ile	Ser	Ile	Asp	Glu	Leu	Ala	Arg	Met	Arg	Ile	Tyr
	50					55					60				
Trp	Gln	Lys	Asp	Gln	Gln	Met	Val	Leu	Ser	Ile	Ile	Ser	Gly	Gln	Val
65					70					75					80
Glu	Val	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Thr	Asp	Met	Asn	Asp
			85						90					95	
Asn	Pro	Arg	Ile	Val	Ile	Leu	Ala	Leu	Arg	Leu	Ser	Asp	Ser	Gly	Thr
		100						105						110	
Tyr	Thr	Cys	Val	Ile	Gln	Lys	Pro	Val	Leu	Lys	Gly	Ala	Tyr	Lys	Pro
		115					120					125			
Glu	His	Leu	Ala	Ser	Val	Arg	Leu	Met	Ile	Arg	Ala	Asp	Phe	Pro	Val
	130					135					140				
Pro	Thr	Ile	Asn	Asp	Leu	Gly	Asn	Pro	Ser	Pro	Asn	Ile	Arg	Arg	Leu
145					150					155					160
Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Arg	Pro	His	Leu	Tyr	Trp	Leu
			165						170					175	
Glu	Asn	Gly	Glu	Glu	Leu	Asn	Ala	Thr	Asn	Thr	Thr	Leu	Ser	Gln	Asp
		180						185						190	
Pro	Glu	Thr	Lys	Leu	Tyr	Met	Ile	Ser	Ser	Glu	Leu	Asp	Phe	Asn	Met
		195					200					205			
Thr	Ser	Asn	His	Ser	Phe	Leu	Cys	Leu	Val	Lys	Tyr	Gly	Asp	Leu	Thr
	210					215						220			
Val	Ser	Gln	Thr	Phe	Tyr	Trp	Gln	Glu	Ser	Lys	Pro	Thr	Pro	Ser	Ala
225					230					235					240
Asn	Gln	His	Leu	Thr	Trp	Thr	Ile	Ile	Ile	Pro	Val	Ser	Ala	Phe	Gly
			245					250						255	

Ile Ser Val Ile Ile Ala Val Ile Leu Thr Cys Leu Thr Cys Arg Asn
260 265 270

Ala Ala Ile Arg Arg Gln Arg Arg Glu Asn Glu Val Glu Met Gln Ser
275 280 285

Cys Ser Gln Ser Pro
290

<210> 192

<211> 301

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 192

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Gln Ala Leu Arg Leu Ser Asp
100 105 110

Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
115 120 125

Tyr Lys Leu Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp
130 135 140

Phe Pro Val Pro Thr Asp Leu Gly Asn Pro Ser Pro Asn Ile Arg Arg
145 150 155 160

Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu Tyr Trp
165 170 175

Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Val Ser Gln
180 185 190

Asp Pro Gly Thr Glu Leu Tyr Met Ile Ser Ser Glu Leu Asp Phe Asn

195	200	205
Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly Glu Leu		
210	215	220
Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu Pro Pro		
225	230	235 240
Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly Ala Leu		
	245	250 255
Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His Val Ala		
	260	265 270
Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr Glu Arg		
	275	280 285
Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly		
290	295	300

<210> 193

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 193

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys		
1	5	10 15
Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys		
	20	25 30
Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val		
	35	40 45
Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu		
50	55	60
Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro		
65	70	75 80
Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp		
	85	90 95
Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp		
	100	105 110
Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala		
	115	120 125
Tyr Lys Leu Glu His Leu Thr Ser Val Arg Leu Met Ile Arg Ala Asp		
130	135	140

Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
145 150 155 160

Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
165 170 175

Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Leu
180 185 190

Ser Gln Asp Pro Glu Thr Glu Leu Tyr Met Ile Ser Ser Glu Leu Asp
195 200 205

Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
210 215 220

Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
225 230 235 240

Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
245 250 255

Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
260 265 270

Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
275 280 285

Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
290 295 300

<210> 194

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 194

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Ser Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
 85 90 95
 Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
 100 105 110
 Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
 115 120 125
 Tyr Lys Leu Glu His Leu Thr Ser Val Arg Leu Met Ile Arg Ala Asp
 130 135 140
 Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
 145 150 155 160
 Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
 165 170 175
 Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Val
 180 185 190
 Ser Gln Asp Pro Gly Thr Glu Leu Tyr Met Ile Ser Ser Glu Leu Asp
 195 200 205
 Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
 210 215 220
 Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
 225 230 235 240
 Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
 245 250 255
 Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
 260 265 270
 Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
 275 280 285
 Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<210> 195

<211> 302

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 195

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
 1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys

20					25					30						
Ser	Gly	Ile	Thr	Pro	Lys	Ser	Val	Thr	Lys	Arg	Val	Lys	Glu	Thr	Val	
35					40					45						
Met	Leu	Ser	Cys	Asp	Tyr	Asn	Thr	Ser	Thr	Glu	Glu	Leu	Thr	Ser	Leu	
50					55					60						
Arg	Ile	Tyr	Trp	Gln	Lys	Asp	Ser	Lys	Met	Val	Leu	Ala	Ile	Leu	Pro	
65					70					75					80	
Gly	Lys	Val	Gln	Val	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Thr	Asp	
85					90					95						
Met	Asn	Asp	Asn	Pro	Arg	Ile	Val	Ile	Leu	Ala	Leu	Arg	Leu	Ser	Asp	
100					105					110						
Ser	Gly	Thr	Tyr	Thr	Cys	Val	Val	Gln	Lys	Asn	Glu	Asn	Gly	Ser	Phe	
115					120					125						
Arg	Arg	Glu	His	Leu	Thr	Ser	Val	Thr	Leu	Ser	Ile	Arg	Ala	Asp	Phe	
130					135					140						
Pro	Val	Pro	Ser	Ile	Thr	Asp	Ile	Gly	His	Pro	Ala	Pro	Asn	Val	Lys	
145					150					155					160	
Arg	Ile	Arg	Cys	Ser	Ala	Ser	Gly	Asp	Phe	Pro	Glu	Pro	Arg	Leu	Ala	
165					170					175						
Trp	Met	Glu	Asp	Gly	Glu	Glu	Leu	Asn	Ala	Val	Asn	Thr	Thr	Val	Asp	
180					185					190						
Gln	Asp	Leu	Asp	Thr	Glu	Leu	Tyr	Ser	Val	Ser	Ser	Glu	Leu	Asp	Phe	
195					200					205						
Asn	Val	Thr	Asn	Asn	His	Ser	Ile	Val	Cys	Leu	Ile	Lys	Tyr	Gly	Glu	
210					215					220						
Leu	Ser	Val	Ser	Gln	Ile	Phe	Pro	Trp	Ser	Lys	Pro	Lys	Gln	Glu	Pro	
225					230					235					240	
Pro	Ile	Asp	Gln	Leu	Pro	Phe	Trp	Val	Ile	Ile	Leu	Val	Ser	Gly	Ala	
245					250					255						
Leu	Val	Leu	Thr	Ala	Val	Val	Leu	Tyr	Cys	Leu	Ala	Cys	Arg	His	Val	
260					265					270						
Ala	Arg	Trp	Lys	Arg	Thr	Arg	Arg	Asn	Glu	Glu	Thr	Val	Gly	Thr	Glu	
275					280					285						
Arg	Leu	Ser	Pro	Ile	Tyr	Leu	Gly	Ser	Ala	Gln	Ser	Ser	Gly			
290					295					300						

<210> 196

<211> 300

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 196

Met	Gly	His	Thr	Met	Lys	Trp	Gly	Ser	Leu	Pro	Pro	Lys	Arg	Pro	Cys	
1				5					10						15	
Leu	Trp	Leu	Ser	Gln	Leu	Leu	Val	Leu	Thr	Gly	Leu	Phe	Tyr	Phe	Cys	
			20					25					30			
Ser	Gly	Ile	Thr	Pro	Lys	Ser	Val	Thr	Lys	Arg	Val	Lys	Glu	Thr	Val	
		35					40					45				
Met	Leu	Ser	Cys	Asp	Tyr	Ser	Thr	Ser	Thr	Glu	Glu	Leu	Thr	Ser	Leu	
	50					55					60					
Arg	Ile	Tyr	Trp	Gln	Lys	Asp	Ser	Lys	Met	Val	Leu	Ala	Ile	Leu	Pro	
65					70					75					80	
Gly	Lys	Val	Gln	Val	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Thr	Asp	
			85						90						95	
Met	Asn	Asp	Asn	Pro	Arg	Ile	Val	Ile	Leu	Ala	Leu	Arg	Leu	Ser	Asp	
		100						105					110			
Ser	Gly	Thr	Tyr	Thr	Cys	Val	Ile	Gln	Lys	Pro	Val	Leu	Lys	Gly	Ala	
	115						120					125				
Tyr	Lys	Leu	Glu	His	Leu	Ala	Ser	Val	Arg	Leu	Met	Ile	Arg	Ala	Asp	
	130					135					140					
Phe	Pro	Val	Pro	Ser	Ile	Thr	Asp	Ile	Gly	His	Pro	Ala	Pro	Asn	Val	
145				150					155						160	
Lys	Arg	Ile	Arg	Cys	Ser	Ala	Ser	Gly	Asp	Phe	Pro	Glu	Pro	Arg	Leu	
			165						170						175	
Ala	Trp	Met	Glu	Asp	Gly	Glu	Glu	Leu	Asn	Ala	Val	Asn	Thr	Thr	Val	
		180						185						190		
Leu	Asp	Thr	Glu	Leu	Tyr	Ser	Val	Ser	Ser	Glu	Leu	Asp	Phe	Asn	Val	
	195						200					205				
Thr	Asn	Asn	His	Ser	Ile	Val	Cys	Leu	Ile	Lys	Tyr	Gly	Glu	Leu	Ser	
	210					215					220					
Val	Ser	Gln	Ile	Phe	Pro	Trp	Ser	Lys	Pro	Lys	Gln	Glu	Pro	Pro	Ile	
225					230					235					240	
Asp	Gln	Leu	Pro	Phe	Trp	Val	Ile	Ile	Pro	Val	Ser	Gly	Ala	Leu	Val	
			245						250					255		
Leu	Thr	Ala	Val	Val	Leu	Tyr	Cys	Leu	Ala	Cys	Arg	His	Val	Ala	Arg	
		260					265						270			

Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr Glu Arg Leu
275 280 285

Ser Pro Ile Tyr Leu Gly Ser Ala Gln Pro Ser Gly
290 295 300

<210> 197

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 197

Met Gly His Thr Met Glu Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
100 105 110

Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
115 120 125

Tyr Lys Leu Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp
130 135 140

Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
145 150 155 160

Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
165 170 175

Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Leu
180 185 190

Ser Gln Asp Pro Glu Thr Glu Leu Tyr Met Ile Ser Ser Glu Leu Asp
195 200 205

Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
210 215 220

Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
225 230 235 240

Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
245 250 255

Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
260 265 270

Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
275 280 285

Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
290 295 300

<210> 198

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 198

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Ser Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
100 105 110

Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
115 120 125

Tyr Lys Leu Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp
130 135 140

Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile

145	150	155	160
Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro Arg Leu	165	170	175
Ala Trp Met Glu Asp Gly Glu Glu Leu Asn Ala Val Asn Thr Thr Val	180	185	190
Asp Gln Asp Leu Asp Thr Glu Leu Tyr Ser Val Ser Ser Glu Leu Asp	195	200	205
Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly	210	215	220
Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu	225	230	235
Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly	245	250	255
Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His	260	265	270
Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr	275	280	285
Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly	290	295	300

<210> 199

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 199

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys	1	5	10	15
Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys	20	25	30	
Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val	35	40	45	
Met Leu Ser Cys Asp Tyr Ser Thr Ser Thr Glu Glu Leu Thr Ser Leu	50	55	60	
Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro	65	70	75	80
Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp	85	90	95	

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
100 105 110

Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
115 120 125

Tyr Lys Leu Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp
130 135 140

Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
145 150 155 160

Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
165 170 175

Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Leu
180 185 190

Ser Gln Asp Pro Glu Thr Lys Leu Tyr Met Ile Ser Ser Glu Leu Asp
195 200 205

Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
210 215 220

Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
225 230 235 240

Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
245 250 255

Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
260 265 270

Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
275 280 285

Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
290 295 300

<210> 200

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 200

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
 35 40 45
 Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
 50 55 60
 Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
 65 70 75 80
 Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
 85 90 95
 Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
 100 105 110
 Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Asp Leu Lys Gly Ala
 115 120 125
 Tyr Lys Leu Glu His Leu Thr Ser Val Arg Leu Met Ile Arg Ala Asp
 130 135 140
 Phe Pro Val Pro Ser Ile Thr Asp Ile Gly His Pro Ala Pro Asn Val
 145 150 155 160
 Lys Arg Ile Arg Cys Ser Ala Ser Gly Asp Phe Pro Glu Pro Arg Leu
 165 170 175
 Ala Trp Met Glu Asp Gly Glu Glu Leu Asn Ala Val Asn Thr Thr Val
 180 185 190
 Asp Gln Asp Leu Asp Thr Glu Leu Tyr Ser Val Ser Ser Glu Leu Asp
 195 200 205
 Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
 210 215 220
 Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
 225 230 235 240
 Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
 245 250 255
 Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
 260 265 270
 Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
 275 280 285
 Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<210> 201

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 201

Met	Gly	His	Thr	Met	Lys	Trp	Gly	Ser	Leu	Pro	Pro	Lys	Arg	Pro	Cys	
1				5					10						15	
Leu	Trp	Leu	Ser	Gln	Leu	Leu	Val	Leu	Thr	Gly	Leu	Phe	Tyr	Phe	Cys	
			20					25					30			
Ser	Gly	Ile	Thr	Pro	Lys	Ser	Val	Thr	Lys	Arg	Val	Lys	Glu	Thr	Val	
		35					40					45				
Met	Leu	Ser	Cys	Asp	Tyr	Asn	Thr	Ser	Thr	Glu	Glu	Leu	Thr	Ser	Leu	
	50					55					60					
Arg	Ile	Tyr	Trp	Gln	Lys	Asp	Ser	Lys	Met	Val	Leu	Ala	Ile	Leu	Pro	
65					70					75					80	
Gly	Lys	Val	Gln	Val	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Thr	Asp	
			85						90						95	
Met	Asn	Asp	Asn	Pro	Arg	Ile	Val	Ile	Leu	Ala	Leu	Arg	Leu	Ser	Asp	
			100					105						110		
Ser	Gly	Thr	Tyr	Thr	Cys	Val	Ile	Gln	Lys	Pro	Asp	Leu	Lys	Gly	Ala	
		115					120						125			
Tyr	Lys	Leu	Glu	His	Leu	Ala	Ser	Val	Arg	Leu	Met	Ile	Arg	Ala	Asp	
	130					135					140					
Phe	Pro	Val	Pro	Ser	Ile	Thr	Asp	Ile	Gly	His	Pro	Ala	Pro	Asn	Val	
145					150					155					160	
Lys	Arg	Ile	Arg	Cys	Ser	Ala	Ser	Gly	Asp	Phe	Pro	Glu	Pro	Arg	Leu	
				165					170						175	
Ala	Trp	Met	Glu	Asp	Gly	Glu	Glu	Leu	Asn	Ala	Val	Asn	Thr	Thr	Val	
		180						185						190		
Asp	Gln	Asp	Leu	Asp	Thr	Glu	Leu	Tyr	Ser	Val	Ser	Ser	Glu	Leu	Asp	
	195						200					205				
Phe	Asn	Val	Thr	Asn	Asn	His	Ser	Ile	Val	Cys	Leu	Ile	Lys	Tyr	Gly	
	210					215					220					
Glu	Leu	Ser	Val	Ser	Gln	Ile	Phe	Pro	Trp	Ser	Lys	Pro	Lys	Gln	Glu	
225					230					235					240	
Pro	Pro	Ile	Asp	Gln	Leu	Pro	Phe	Trp	Val	Ile	Ile	Pro	Val	Ser	Gly	
				245					250					255		
Ala	Leu	Val	Leu	Thr	Ala	Val	Val	Leu	Tyr	Cys	Leu	Ala	Cys	Arg	His	
		260						265					270			
Val	Ala	Arg	Trp	Lys	Arg	Thr	Arg	Arg	Asn	Glu	Glu	Thr	Val	Gly	Thr	

275

280

285

Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<210> 202

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 202

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
 1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
 20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
 35 40 45

Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
 50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
 65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
 85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
 100 105 110

Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
 115 120 125

Tyr Lys Leu Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp
 130 135 140

Phe Pro Val Pro Ser Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
 145 150 155 160

Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
 165 170 175

Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Val
 180 185 190

Ser Gln Asp Pro Gly Thr Glu Leu Tyr Met Ile Ser Ser Glu Leu Asp
 195 200 205

Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
 210 215 220

Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
225 230 235 240

Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
245 250 255

Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
260 265 270

Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
275 280 285

Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
290 295 300

<210> 203

<211> 302

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 203

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Ser Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Phe Pro Asp
85 90 95

Ile Ile Asn Asn Leu Ser Leu Met Ile Leu Ala Leu Arg Leu Ser Asp
100 105 110

Lys Gly Thr Tyr Thr Cys Val Val Gln Lys Asn Glu Asn Gly Ser Phe
115 120 125

Arg Arg Glu His Leu Thr Ser Val Thr Leu Ser Ile Arg Ala Asp Phe
130 135 140

Pro Val Ser Ser Ile Thr Asp Ile Gly His Pro Ala Pro Asn Val Lys
145 150 155 160

Arg Ile Arg Cys Ser Ala Ser Gly Gly Phe Pro Glu Pro Arg Leu Ala
 165 170 175
 Trp Met Glu Asp Gly Glu Glu Leu Asn Ala Val Asn Thr Thr Val Asp
 180 185 190
 Gln Asp Leu Asp Thr Glu Leu Tyr Ser Val Ser Ser Glu Leu Asp Phe
 195 200 205
 Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly Glu
 210 215 220
 Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu Pro
 225 230 235 240
 Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly Ala
 245 250 255
 Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His Val
 260 265 270
 Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr Glu
 275 280 285
 Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<210> 204
 <211> 303
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 204
 Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
 1 5 10 15
 Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
 20 25 30
 Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
 35 40 45
 Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
 50 55 60
 Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
 65 70 75 80
 Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
 85 90 95
 Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp

100					105					110					
Ser	Gly	Thr	Tyr	Thr	Cys	Val	Ile	Gln	Lys	Pro	Val	Leu	Lys	Gly	Ala
115					120					125					
Tyr	Lys	Leu	Glu	His	Leu	Thr	Ser	Val	Arg	Leu	Met	Ile	Arg	Ala	Asp
130					135					140					
Phe	Pro	Val	Pro	Ser	Ile	Thr	Asp	Ile	Gly	His	Pro	Ala	Pro	Asn	Val
145					150					155					160
Lys	Arg	Ile	Arg	Cys	Ser	Ala	Ser	Gly	Gly	Phe	Pro	Glu	Pro	Arg	Leu
165					170					175					
Ala	Trp	Met	Glu	Asp	Gly	Glu	Glu	Leu	Asn	Ala	Val	Asn	Thr	Thr	Val
180					185					190					
Asp	Gln	Asp	Leu	Asp	Thr	Glu	Leu	Tyr	Ser	Val	Ser	Ser	Glu	Leu	Asp
195					200					205					
Phe	Asn	Val	Thr	Asn	Asn	His	Ser	Ile	Val	Cys	Leu	Ile	Lys	Tyr	Gly
210					215					220					
Glu	Leu	Ser	Val	Ser	Gln	Ile	Phe	Pro	Trp	Ser	Lys	Pro	Lys	Gln	Glu
225					230					235					240
Pro	Pro	Ile	Asp	Gln	Leu	Pro	Phe	Trp	Val	Ile	Ile	Pro	Val	Ser	Gly
245					250					255					
Ala	Leu	Val	Leu	Thr	Ala	Val	Val	Leu	Tyr	Cys	Leu	Ala	Cys	Arg	His
260					265					270					
Val	Ala	Arg	Trp	Lys	Arg	Thr	Arg	Arg	Asn	Glu	Glu	Thr	Val	Gly	Thr
275					280					285					
Glu	Arg	Leu	Ser	Pro	Ile	Tyr	Leu	Gly	Ser	Ala	Gln	Ser	Ser	Gly	
290					295					300					

<210> 205

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 205

Met	Gly	His	Thr	Met	Lys	Trp	Gly	Ser	Leu	Pro	Pro	Lys	Arg	Pro	Cys
1				5					10					15	

Leu	Trp	Leu	Ser	Gln	Leu	Leu	Val	Leu	Thr	Asp	Leu	Phe	Tyr	Phe	Cys
			20					25					30		

Ser	Gly	Ile	Thr	Pro	Lys	Ser	Val	Thr	Lys	Arg	Val	Lys	Glu	Thr	Val
		35					40					45			

Met	Leu	Ser	Cys	Asp	Tyr	Asn	Thr	Ser	Thr	Glu	Glu	Leu	Thr	Ser	Leu	50	55	60	
Arg	Ile	Tyr	Trp	Gln	Lys	Asp	Ser	Lys	Met	Val	Leu	Ala	Ile	Leu	Pro	65	70	75	80
Gly	Lys	Val	Gln	Val	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Thr	Asp	85	90	95	
Met	Asn	Asp	Asn	Pro	Arg	Ile	Val	Ile	Leu	Ala	Leu	Arg	Leu	Ser	Asp	100	105	110	
Ser	Gly	Thr	Tyr	Thr	Cys	Val	Ile	Gln	Lys	Pro	Val	Leu	Lys	Gly	Ala	115	120	125	
Tyr	Lys	Leu	Glu	His	Leu	Ala	Ser	Val	Arg	Leu	Met	Ile	Arg	Ala	Asp	130	135	140	
Phe	Pro	Val	Pro	Thr	Ile	Asn	Asp	Leu	Gly	Asn	Pro	Ser	Pro	Asn	Ile	145	150	155	160
Arg	Arg	Leu	Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Arg	Pro	His	Leu	165	170	175	
Tyr	Trp	Leu	Glu	Asn	Gly	Glu	Glu	Leu	Asn	Ala	Thr	Asn	Thr	Thr	Val	180	185	190	
Ser	Gln	Asp	Pro	Gly	Thr	Glu	Leu	Tyr	Met	Ile	Ser	Ser	Glu	Leu	Asp	195	200	205	
Phe	Asn	Val	Thr	Asn	Asn	His	Ser	Ile	Val	Cys	Leu	Ile	Lys	Tyr	Gly	210	215	220	
Glu	Leu	Ser	Val	Ser	Gln	Ile	Phe	Pro	Trp	Ser	Lys	Pro	Lys	Gln	Glu	225	230	235	240
Pro	Pro	Ile	Asp	Gln	Leu	Pro	Phe	Trp	Val	Ile	Ile	Pro	Val	Ser	Gly	245	250	255	
Ala	Leu	Val	Leu	Thr	Ala	Val	Val	Leu	Tyr	Cys	Leu	Ala	Cys	Arg	His	260	265	270	
Val	Ala	Arg	Trp	Lys	Arg	Thr	Arg	Arg	Asn	Glu	Glu	Thr	Val	Gly	Thr	275	280	285	
Glu	Arg	Leu	Ser	Pro	Ile	Tyr	Leu	Gly	Ser	Ala	Gln	Ser	Ser	Gly		290	295	300	

<210> 206

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

peptide

<400> 206

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
100 105 110

Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
115 120 125

Tyr Lys Leu Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp
130 135 140

Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
145 150 155 160

Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
165 170 175

Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Leu
180 185 190

Ser Gln Asp Pro Glu Thr Lys Leu Tyr Met Ile Ser Ser Glu Leu Asp
195 200 205

Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
210 215 220

Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
225 230 235 240

Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
245 250 255

Ala Leu Val Leu Thr Ala Ala Val Leu Tyr Cys Leu Ala Cys Arg His
260 265 270

Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
275 280 285

Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<210> 207

<211> 300

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 207

Met	Gly	His	Thr	Met	Lys	Trp	Gly	Ser	Leu	Pro	Pro	Lys	Arg	Pro	Cys	1	5	10	15
Leu	Trp	Leu	Ser	Gln	Leu	Leu	Val	Leu	Thr	Gly	Leu	Phe	Tyr	Phe	Cys	20	25	30	
Ser	Gly	Ile	Thr	Pro	Lys	Ser	Val	Thr	Lys	Arg	Val	Lys	Glu	Thr	Val	35	40	45	
Met	Leu	Ser	Cys	Asp	Tyr	Ser	Thr	Ser	Thr	Glu	Glu	Leu	Thr	Ser	Leu	50	55	60	
Arg	Ile	Tyr	Trp	Gln	Lys	Asp	Ser	Lys	Met	Val	Leu	Ala	Ile	Leu	Pro	65	70	75	80
Gly	Lys	Val	Gln	Val	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Thr	Asp	85	90	95	
Met	Asn	Asp	Asn	Pro	Arg	Ile	Val	Ile	Leu	Ala	Leu	Arg	Leu	Ser	Asp	100	105	110	
Ser	Gly	Thr	Tyr	Thr	Cys	Val	Ile	Gln	Lys	Pro	Val	Leu	Lys	Gly	Ala	115	120	125	
Tyr	Lys	Leu	Glu	His	Leu	Ala	Ser	Val	Arg	Leu	Met	Ile	Arg	Ala	Asp	130	135	140	
Phe	Pro	Val	Pro	Thr	Ile	Asn	Asp	Leu	Gly	Asn	Pro	Ser	Pro	Asn	Ile	145	150	155	160
Arg	Arg	Leu	Ile	Cys	Ser	Gly	Phe	Pro	Arg	Pro	His	Leu	Tyr	Trp	Leu	165	170	175	
Glu	Asn	Gly	Glu	Glu	Leu	Asn	Ala	Thr	Asn	Thr	Thr	Val	Ser	Gln	Asp	180	185	190	
Pro	Gly	Thr	Glu	Leu	Tyr	Met	Ile	Ser	Ser	Glu	Leu	Asp	Phe	Asn	Val	195	200	205	
Thr	Asn	Asn	His	Ser	Ile	Val	Cys	Leu	Ile	Lys	Tyr	Gly	Glu	Leu	Ser	210	215	220	
Val	Ser	Gln	Ile	Phe	Pro	Trp	Ser	Lys	Pro	Lys	Gln	Glu	Pro	Pro	Ile				

225 230 235 240

Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly Ala Leu Val
 245 250 255

Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His Val Ala Arg
 260 265 270

Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr Glu Arg Leu
 275 280 285

Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<210> 208

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 208

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
 20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
 35 40 45

Met Leu Ser Cys Asp Tyr Ser Thr Ser Thr Glu Glu Leu Thr Ser Leu
 50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
 85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
 100 105 110

Lys Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
115 120 125

Tyr Lys Leu Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp
130 135 140

Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
145 150 155 160

Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
 165 170 175

Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Val
180 185 190

Ser Gln Asp Pro Gly Thr Glu Leu Tyr Met Ile Ser Ser Glu Leu Asp
195 200 205

Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
210 215 220

Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
225 230 235 240

Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
245 250 255

Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
260 265 270

Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
275 280 285

Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
290 295 300

<210> 209

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 209

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Ser Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
100 105 110

Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
 115 120 125
 Tyr Lys Leu Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp
 130 135 140
 Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
 145 150 155 160
 Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
 165 170 175
 Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Val
 180 185 190
 Ser Gln Asp Pro Gly Thr Glu Leu Tyr Met Ile Ser Ser Glu Leu Asp
 195 200 205
 Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
 210 215 220
 Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
 225 230 235 240
 Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
 245 250 255
 Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
 260 265 270
 Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
 275 280 285
 Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<210> 210

<211> 304

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 210

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
 1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
 20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
 35 40 45

Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu

50	55	60
Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro		
65	70	75 80
Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp		
	85	90 95
Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp		
	100	105 110
Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Asp Leu Lys Gly Ala		
	115	120 125
Tyr Lys Leu Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp		
	130	135 140
Phe Pro Val Pro Ser Ile Thr Asp Ile Gly His Pro Ala Pro Asn Val		
	145	150 155 160
Lys Arg Ile Arg Cys Ser Ala Ser Gly Gly Phe Pro Glu Pro Arg Leu		
	165	170 175
Ala Trp Met Glu Asp Gly Glu Glu Leu Asn Ala Val Asn Thr Thr Val		
	180	185 190
Asp Gln Asp Leu Asp Thr Glu Leu Tyr Ser Val Ser Ser Glu Leu Asp		
	195	200 205
Phe Asn Met Thr Ser Asn His Ser Phe Leu Cys Leu Val Lys Tyr Gly		
	210	215 220
Asp Leu Thr Val Ser Gln Thr Phe Tyr Trp Gln Glu Ser Lys Pro Thr		
	225	230 235 240
Pro Ser Ala Asn Gln His Leu Thr Trp Thr Ile Ile Ile Pro Val Ser		
	245	250 255
Ala Phe Gly Ile Ser Val Ile Ile Ala Val Ile Leu Thr Cys Leu Thr		
	260	265 270
Cys Arg Asn Ala Ala Ile Arg Arg Gln Arg Arg Glu Asn Glu Gly Lys		
	275	280 285
Cys Lys Val Leu Ser Val Ser Ile Gly Thr Lys Leu Lys Phe Asn Arg		
	290	295 300

<210> 211

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 211

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
100 105 110

Lys Gly Thr Tyr Thr Cys Val Val Gln Lys Pro Asp Leu Lys Gly Ala
115 120 125

Tyr Lys Leu Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp
130 135 140

Phe Pro Val Pro Ser Ile Thr Asp Ile Gly His Pro Ala Pro Asn Val
145 150 155 160

Lys Arg Ile Arg Cys Ser Ala Ser Gly Gly Phe Pro Glu Pro Arg Leu
165 170 175

Ala Trp Met Glu Asp Gly Glu Glu Leu Asn Ala Val Asn Thr Thr Val
180 185 190

Asp Gln Asp Leu Asp Thr Glu Leu Tyr Ser Val Ser Ser Glu Leu Asp
195 200 205

Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
210 215 220

Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
225 230 235 240

Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
245 250 255

Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
260 265 270

Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
275 280 285

Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
290 295 300

<210> 212
<211> 296
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 212

Met	Gly	His	Thr	Met	Lys	Trp	Gly	Ser	Leu	Pro	Pro	Lys	Arg	Pro	Cys	
1				5					10					15		
Leu	Trp	Leu	Ser	Gln	Leu	Leu	Val	Leu	Thr	Gly	Leu	Phe	Tyr	Phe	Cys	
		20						25					30			
Ser	Gly	Ile	Thr	Pro	Lys	Ser	Val	Thr	Lys	Arg	Val	Lys	Glu	Thr	Val	
		35					40					45				
Met	Leu	Ser	Cys	Asp	Tyr	Ser	Thr	Ser	Thr	Glu	Glu	Leu	Thr	Ser	Leu	
	50					55				60						
Arg	Ile	Tyr	Trp	Gln	Lys	Asp	Ser	Lys	Met	Val	Leu	Ala	Ile	Leu	Pro	
65					70					75					80	
Gly	Lys	Val	Gln	Val	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Thr	Asp	
			85						90					95		
Met	Asn	Asp	Asn	Pro	Arg	Ile	Val	Ile	Leu	Ala	Leu	Arg	Leu	Ser	Asp	
			100					105					110			
Ser	Gly	Thr	Tyr	Thr	Cys	Val	Ile	Gln	Lys	Pro	Val	Leu	Lys	Gly	Ala	
	115						120					125				
Tyr	Lys	Leu	Glu	His	Leu	Thr	Ser	Val	Arg	Leu	Met	Ile	Arg	Ala	Asp	
	130					135					140					
Phe	Pro	Val	Pro	Thr	Ile	Asn	Asp	Leu	Gly	Asn	Pro	Ser	Pro	Asn	Ile	
145					150					155					160	
Arg	Arg	Leu	Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Arg	Pro	His	Leu	
			165						170					175		
Tyr	Trp	Leu	Glu	Asn	Gly	Glu	Glu	Leu	Asn	Ala	Thr	Asn	Thr	Thr	Leu	
		180						185					190			
Ser	Gln	Asp	Pro	Glu	Thr	Lys	Leu	Tyr	Met	Ile	Ser	Ser	Glu	Leu	Asp	
		195					200					205				
Phe	Asn	Met	Thr	Ser	Asn	His	Ser	Phe	Leu	Cys	Leu	Val	Lys	Tyr	Gly	
	210					215					220					
Asp	Leu	Thr	Val	Ser	Gln	Ser	Phe	Tyr	Trp	Gln	Glu	Ser	Lys	Pro	Thr	
225					230					235					240	

Pro Ser Ala Asn Gln His Leu Thr Trp Thr Ile Ile Ile Pro Val Ser
245 250 255

Ala Phe Gly Ile Ser Val Ile Ile Ala Val Ile Leu Thr Cys Leu Thr
260 265 270

Cys Arg Asn Ala Ala Ile Arg Arg Gln Arg Arg Glu Asn Glu Val Glu
275 280 285

Met Gln Ser Cys Ser Gln Ser Pro
290 295

<210> 213

<211> 302

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 213

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
100 105 110

Lys Gly Thr Tyr Thr Cys Val Val Gln Lys Asn Glu Asn Gly Ser Phe
115 120 125

Arg Arg Glu His Leu Thr Ser Val Thr Leu Ser Ile Arg Ala Asp Phe
130 135 140

Pro Val Pro Ser Ile Thr Asp Ile Gly His Pro Ala Pro Asn Val Lys
145 150 155 160

Arg Ile Arg Cys Ser Ala Ser Gly Gly Phe Pro Glu Pro Arg Leu Ala
165 170 175

Trp Met Glu Asp Gly Glu Glu Leu Asn Ala Val Asn Thr Thr Val Asp

180	185	190
Gln Asp Leu Asp Thr Glu Leu Tyr Ser Val Ser Ser Glu Leu Asp Phe		
195	200	205
Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly Glu		
210	215	220
Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu Pro		
225	230	235
Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly Ala		
245	250	255
Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His Val		
260	265	270
Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr Glu		
275	280	285
Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly		
290	295	300

<210> 214
 <211> 296
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 214
 Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
 1 5 10 15
 Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
 20 25 30
 Ser Gly Thr Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
 35 40 45
 Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
 50 55 60
 Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
 65 70 75 80
 Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
 85 90 95
 Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Pro Ser Asp
 100 105 110
 Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
 115 120 125

Tyr Lys Leu Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp
 130 135 140
 Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
 145 150 155 160
 Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
 165 170 175
 Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Leu
 180 185 190
 Ser Gln Asp Pro Glu Thr Lys Leu Tyr Met Ile Ser Ser Glu Leu Asp
 195 200 205
 Phe Asn Met Thr Ser Asn His Ser Phe Leu Cys Leu Val Lys Tyr Gly
 210 215 220
 Asp Leu Thr Val Ser Gln Thr Phe Tyr Trp Gln Glu Ser Lys Pro Thr
 225 230 235 240
 Pro Ser Ala Asn Gln His Leu Thr Trp Thr Ile Ile Ile Pro Val Ser
 245 250 255
 Ala Phe Gly Ile Ser Val Ile Ile Ala Val Ile Leu Thr Cys Leu Thr
 260 265 270
 Cys Arg Asn Ala Ala Ile Arg Arg Gln Arg Arg Glu Asn Glu Val Glu
 275 280 285
 Met Gln Ser Cys Ser Gln Ser Pro
 290 295

<210> 215

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 215

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
 1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
 20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
 35 40 45

Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
 50 55 60

Arg	Ile	Tyr	Trp	Gln	Lys	Asp	Ser	Lys	Met	Val	Leu	Ala	Ile	Leu	Pro
65					70					75					80
Gly	Lys	Val	Gln	Val	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Thr	Asp
			85						90					95	
Met	Asn	Asp	Asn	Pro	Arg	Ile	Val	Ile	Leu	Ala	Leu	Arg	Leu	Ser	Asp
		100						105					110		
Ser	Gly	Thr	Tyr	Thr	Cys	Val	Ile	Gln	Lys	Pro	Asp	Leu	Lys	Gly	Ala
	115						120						125		
Tyr	Lys	Leu	Glu	His	Leu	Ala	Ser	Val	Arg	Leu	Met	Ile	Arg	Ala	Asp
	130					135					140				
Phe	Pro	Val	Pro	Thr	Ile	Asn	Asp	Leu	Gly	Asn	Pro	Ser	Pro	Asn	Ile
145					150					155					160
Arg	Arg	Leu	Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Arg	Pro	His	Leu
			165						170					175	
Tyr	Trp	Leu	Glu	Asn	Gly	Glu	Glu	Leu	Asn	Ala	Thr	Asn	Thr	Thr	Leu
		180						185					190		
Ser	Gln	Asp	Pro	Glu	Thr	Lys	Leu	Tyr	Met	Ile	Ser	Ser	Glu	Leu	Asp
	195						200					205			
Phe	Asn	Val	Thr	Asn	Asn	Arg	Ser	Ile	Val	Cys	Leu	Ile	Lys	Tyr	Gly
	210					215					220				
Glu	Leu	Ser	Val	Ser	Gln	Ile	Phe	Pro	Trp	Ser	Lys	Pro	Lys	Gln	Glu
225					230					235					240
Pro	Pro	Ile	Asp	Gln	Leu	Pro	Phe	Trp	Val	Ile	Ile	Pro	Val	Ser	Gly
			245						250					255	
Ala	Leu	Val	Leu	Thr	Ala	Val	Val	Leu	Tyr	Cys	Leu	Ala	Cys	Arg	His
		260						265					270		
Val	Ala	Arg	Trp	Lys	Arg	Thr	Arg	Arg	Asn	Glu	Glu	Thr	Val	Gly	Thr
	275						280					285			
Glu	Arg	Leu	Ser	Pro	Ile	Tyr	Leu	Gly	Ser	Ala	Gln	Ser	Ser	Gly	
	290					295					300				

<210> 216

<211> 296

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 216

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys

1	5	10	15
Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys	20	25	30
Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val	35	40	45
Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu	50	55	60
Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro	65	70	75
Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp	85	90	95
Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp	100	105	110
Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala	115	120	125
Tyr Lys Leu Glu His Leu Thr Ser Val Arg Leu Met Ile Arg Ala Asp	130	135	140
Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile	145	150	155
Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu	165	170	175
Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Val	180	185	190
Ser Gln Asp Pro Glu Thr Lys Leu Tyr Met Ile Ser Ser Glu Leu Asp	195	200	205
Phe Asn Thr Thr Ser Asn His Ser Phe Leu Cys Leu Val Lys Tyr Gly	210	215	220
Asp Leu Thr Val Ser Gln Thr Phe Tyr Trp Gln Glu Ser Lys Pro Thr	225	230	235
Pro Ser Ala Asn Gln His Leu Thr Trp Thr Ile Ile Ile Pro Val Ser	245	250	255
Ala Phe Gly Ile Ser Val Ile Ile Ala Val Ile Leu Thr Cys Leu Thr	260	265	270
Cys Arg Asn Ala Ala Ile Arg Arg Gln Arg Arg Glu Asn Glu Val Glu	275	280	285
Met Gln Ser Cys Ser Gln Ser Pro	290	295	

<210> 217
<211> 303
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
peptide

<400> 217

Met	Gly	His	Thr	Met	Lys	Trp	Gly	Ser	Leu	Pro	Pro	Lys	Arg	Pro	Cys	
1				5				10						15		
Leu	Trp	Leu	Ser	Gln	Leu	Leu	Val	Leu	Thr	Gly	Leu	Phe	Tyr	Phe	Cys	
		20						25						30		
Ser	Gly	Ile	Thr	Pro	Lys	Ser	Val	Thr	Lys	Arg	Val	Lys	Glu	Thr	Val	
		35					40						45			
Met	Leu	Ser	Cys	Asp	Tyr	Asn	Thr	Ser	Thr	Glu	Glu	Leu	Thr	Ser	Leu	
	50					55					60					
Arg	Ile	Tyr	Trp	Gln	Lys	Asp	Ser	Lys	Met	Val	Leu	Ala	Ile	Leu	Pro	
	65				70					75					80	
Gly	Lys	Val	Gln	Val	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Thr	Asp	
			85						90						95	
Met	Asn	Asp	Asn	Pro	Arg	Ile	Val	Ile	Leu	Ala	Leu	Arg	Leu	Ser	Asp	
		100						105					110			
Lys	Gly	Thr	Tyr	Thr	Cys	Val	Ile	Gln	Lys	Pro	Asp	Leu	Lys	Gly	Ala	
		115					120						125			
Tyr	Lys	Leu	Glu	His	Leu	Ala	Ser	Val	Arg	Leu	Met	Ile	Arg	Ala	Asp	
	130					135					140					
Phe	Pro	Val	Pro	Thr	Ile	Asn	Asp	Leu	Gly	Asn	Pro	Ser	Pro	Asn	Ile	
	145				150					155					160	
Arg	Arg	Leu	Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Arg	Pro	His	Leu	
			165						170						175	
Tyr	Trp	Leu	Glu	Asn	Gly	Glu	Glu	Leu	Asn	Ala	Thr	Asn	Thr	Thr	Val	
		180						185						190		
Ser	Gln	Asp	Pro	Gly	Thr	Glu	Leu	Tyr	Met	Ile	Ser	Ser	Glu	Leu	Asp	
		195					200						205			
Phe	Asn	Val	Thr	Asn	Asn	His	Ser	Ile	Val	Cys	Leu	Ile	Lys	Tyr	Gly	
	210					215					220					
Glu	Leu	Ser	Val	Ser	Gln	Ile	Phe	Pro	Trp	Ser	Lys	Pro	Lys	Gln	Glu	
	225				230					235					240	
Pro	Pro	Ile	Asp	Gln	Leu	Pro	Phe	Trp	Val	Ile	Ile	Pro	Val	Ser	Gly	
			245						250						255	

Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
260 265 270

Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
275 280 285

Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
290 295 300

<210> 218

<211> 296

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 218

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
100 105 110

Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Asp Leu Lys Gly Ala
115 120 125

Tyr Lys Leu Glu His Leu Thr Ser Val Arg Leu Met Ile Arg Ala Asp
130 135 140

Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
145 150 155 160

Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
165 170 175

Tyr Trp Leu Glu Asn Gly Lys Glu Leu Asn Ala Thr Asn Thr Thr Leu
180 185 190

Ser Gln Asp Pro Glu Thr Lys Leu Tyr Met Ile Ser Ser Glu Leu Asp
195 200 205

Phe Asn Met Thr Ser Asn His Ser Phe Leu Cys Leu Val Lys Tyr Gly
210 215 220

Asp Leu Thr Val Ser Gln Thr Phe Tyr Trp Gln Glu Ser Lys Pro Thr
225 230 235 240

Pro Ser Ala Asn Gln His Leu Thr Trp Thr Ile Ile Ile Pro Val Ser
245 250 255

Ala Phe Gly Ile Ser Val Ile Ile Ala Val Ile Leu Thr Cys Leu Thr
260 265 270

Cys Arg Asn Ala Ala Ile Arg Arg Gln Arg Arg Glu Asn Glu Val Glu
275 280 285

Met Gln Ser Cys Ser Gln Ser Pro
290 295

<210> 219

<211> 302

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 219

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
100 105 110

Ser Gly Thr Tyr Thr Cys Val Val Gln Lys Asn Glu Asn Gly Ser Phe
115 120 125

Arg Arg Glu His Leu Thr Ser Val Thr Leu Ser Ile Arg Ala Asp Phe

130

135

140

Pro Val Pro Ser Ile Thr Asp Ile Gly His Pro Ala Pro Asn Val Lys
 145 150 155 160

Arg Ile Arg Cys Ser Ala Ser Gly Gly Phe Pro Glu Pro Arg Leu Ala
 165 170 175

Trp Met Glu Asp Gly Glu Glu Leu Asn Ala Val Asn Thr Thr Val Asp
 180 185 190

Gln Asp Leu Asp Thr Glu Leu Tyr Ser Val Ser Ser Glu Leu Asp Phe
 195 200 205

Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly Glu
 210 215 220

Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu Pro
 225 230 235 240

Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly Ala
 245 250 255

Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His Val
 260 265 270

Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr Glu
 275 280 285

Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<210> 220

<211> 303

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 220

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
 1 5 10 15

Leu Arg Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
 20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
 35 40 45

Met Leu Ser Cys Asp Tyr Ser Thr Ser Thr Glu Glu Leu Thr Ser Leu
 50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
 65 70 75 80

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
 20 25 30
 Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
 35 40 45
 Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
 50 55 60
 Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
 65 70 75 80
 Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
 85 90 95
 Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
 100 105 110
 Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
 115 120 125
 Tyr Lys Leu Glu His Leu Thr Ser Val Arg Leu Met Ile Arg Ala Asp
 130 135 140
 Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
 145 150 155 160
 Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
 165 170 175
 Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Leu
 180 185 190
 Ser Gln Asp Pro Glu Thr Lys Leu Tyr Met Ile Ser Ser Glu Leu Asp
 195 200 205
 Phe Asn Met Thr Ser Asn Leu Cys Leu Val Lys Tyr Gly Asp Leu Thr
 210 215 220
 Val Ser Gln Thr Phe Tyr Trp Gln Glu Ser Lys Pro Thr Pro Ser Ala
 225 230 235 240
 Asn Gln His Leu Thr Trp Thr Ile Ile Ile Pro Val Ser Ala Phe Gly
 245 250 255
 Ile Ser Val Ile Ile Ala Val Ile Leu Thr Cys Leu Thr Cys Arg Asn
 260 265 270
 Ala Ala Ile Arg Arg Gln Arg Arg Glu Asn Glu Val Glu Met Gln Ser
 275 280 285
 Cys Ser Gln Ser Pro
 290

<210> 222

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 222

Met	Ser	His	Thr	Arg	Arg	Gln	Gly	Thr	Ser	Pro	Ser	Lys	Cys	Pro	Tyr	
1				5					10					15		
Leu	Lys	Phe	Phe	Gln	Phe	Leu	Val	Leu	Ala	Ser	Leu	Ser	His	Phe	Cys	
		20						25					30			
Ser	Gly	Val	Ile	His	Val	Thr	Lys	Glu	Val	Lys	Glu	Val	Ala	Thr	Leu	
		35					40					45				
Ser	Cys	Gly	Leu	Asn	Val	Ser	Val	Glu	Glu	Leu	Ala	Gln	Thr	Arg	Ile	
	50					55					60					
Tyr	Trp	Gln	Lys	Gly	Lys	Lys	Met	Val	Leu	Thr	Met	Met	Ser	Gly	Asp	
65					70					75					80	
Met	Asn	Ile	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Phe	Asp	Ile	Thr	
				85					90					95		
Asn	Asn	Leu	Ser	Ile	Val	Ile	Leu	Ala	Leu	Arg	Pro	Ser	Asp	Glu	Gly	
		100						105						110		
Thr	Tyr	Glu	Cys	Val	Val	Leu	Glu	Tyr	Glu	Lys	Asp	Ala	Phe	Lys	Arg	
		115					120					125				
Glu	His	Leu	Ala	Glu	Val	Met	Leu	Ser	Val	Lys	Ala	Asp	Phe	Pro	Thr	
	130					135					140					
Pro	Ser	Ile	Ser	Asp	Phe	Glu	Ile	Pro	Pro	Ser	Asn	Ile	Arg	Arg	Ile	
145					150					155					160	
Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Glu	Pro	His	Leu	Ser	Trp	Leu	
			165						170					175		
Glu	Asn	Gly	Glu	Glu	Leu	Asn	Ala	Ile	Asn	Thr	Thr	Ala	Ser	Gln	Asp	
		180						185						190		
Pro	Gly	Thr	Glu	Leu	Tyr	Thr	Val	Ser	Ser	Lys	Leu	Asp	Phe	Asn	Met	
		195					200					205				
Thr	Thr	Asn	His	Ser	Phe	Met	Cys	Leu	Ile	Lys	Tyr	Gly	His	Leu	Arg	
	210					215						220				
Val	Asn	Gln	Thr	Phe	Asn	Trp	Asn	Thr	Pro	Lys	Gln	Glu	His	Phe	Pro	
225					230					235					240	
Asp	Asn	Leu	Leu	Pro	Ser	Trp	Ala	Ile	Thr	Leu	Ile	Ser	Val	Asn	Gly	
			245						250					255		
Ile	Phe	Val	Ile	Cys	Cys	Leu	Thr	His	Cys	Phe	Ala	Pro	Arg	Cys	Arg	

260

265

270

Glu Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Ala Arg Pro Val
 275 280 285

<210> 223

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 223

Met Gly Tyr Thr Arg Arg Gln Gly Thr Ser Pro Ser Lys Cys Pro Tyr
 1 5 10 15

Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Ser Leu Ser His Phe Cys
 20 25 30

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
 35 40 45

Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Pro Ile
 50 55 60

Tyr Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
 65 70 75 80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
 85 90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
 100 105 110

Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
 115 120 125

Glu His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr
 130 135 140

Pro Ser Ile Thr Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
 145 150 155 160

Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Phe Trp Leu
 165 170 175

Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp
 180 185 190

Pro Glu Thr Glu Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met
 195 200 205

Thr Thr Asn Arg Ser Phe Val Cys Leu Ile Lys Tyr Gly His Leu Arg
 210 215 220

Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
225 230 235 240

Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Ala Asn Gly
245 250 255

Ile Phe Val Ile Cys Cys Leu Thr Tyr Arg Phe Ala Pro Arg Cys Arg
260 265 270

Glu Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val Cys Pro Val
275 280 285

<210> 224

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 224

Met Gly Tyr Thr Arg Arg Gln Gly Ile Ser Pro Ser Lys Cys Pro Tyr
1 5 10 15

Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Ser Leu Ser His Phe Cys
20 25 30

Ser Gly Val Ile His Val Thr Lys Lys Val Lys Glu Val Ala Thr Leu
35 40 45

Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
50 55 60

His Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
65 70 75 80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
85 90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
100 105 110

Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
115 120 125

Glu His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr
130 135 140

Pro Ser Ile Ser Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
145 150 155 160

Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu
165 170 175

Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp
180 185 190

Pro Gly Thr Glu Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met
195 200 205

Thr Thr Asp Arg Ser Phe Val Cys Leu Ile Lys Tyr Gly His Leu Arg
210 215 220

Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
225 230 235 240

Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly
245 250 255

Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg
260 265 270

Glu Arg Arg Arg Asn Gly Arg Leu Arg Arg Glu Ser Val Arg Pro Val
275 280 285

<210> 225

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 225

Met Ser His Thr Gln Arg Gln Gly Ile Ser Pro Ser Lys Cys Pro Tyr
1 5 10 15

Leu Asn Phe Phe Gln Leu Leu Val Leu Ala Ser Leu Ser His Phe Cys
20 25 30

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
35 40 45

Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
50 55 60

Tyr Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
65 70 75 80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
85 90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
100 105 110

Thr Tyr Glu Cys Val Val Leu Glu Tyr Glu Lys Asp Ala Phe Lys Arg
115 120 125

Glu His Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr

130	135	140
Pro Ser Ile Thr Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile		
145	150	155 160
Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Phe Trp Leu		
	165	170 175
Glu Asn Gly Glu Glu Leu Asn Ala Ile Ser Thr Thr Val Ser Gln Asp		
	180	185 190
Pro Glu Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met		
	195	200 205
Thr Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg		
	210	215 220
Val Asn Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro		
	225	230 235 240
Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly		
	245	250 255
Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg		
	260	265 270
Glu Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val His Pro Val		
	275	280 285

<210> 226

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 226

Met Gly His Thr Arg Arg Gln Gly Thr Ser Pro Ser Lys Cys Pro Tyr		
1	5	10 15
Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Gly Leu Ser His Leu Cys		
	20	25 30
Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu		
	35	40 45
Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile		
	50	55 60
Tyr Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp		
	65	70 75 80
Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr		
	85	90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
 100 105 110
 Thr Tyr Glu Cys Val Val Leu Glu Tyr Glu Lys Asp Ala Phe Lys Arg
 115 120 125
 Glu His Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr
 130 135 140
 Pro Ser Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile
 145 150 155 160
 Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Phe Trp Leu
 165 170 175
 Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp
 180 185 190
 Pro Glu Thr Glu Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met
 195 200 205
 Thr Ala Asn His Ser Phe Val Cys Leu Ile Lys Tyr Gly His Leu Arg
 210 215 220
 Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
 225 230 235 240
 Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly
 245 250 255
 Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Gly Cys Arg
 260 265 270
 Glu Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val Cys Pro Val
 275 280 285

<210> 227

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 227

Met Ser His Ile Arg Arg Gln Gly Ile Ser Pro Ser Lys Cys Pro Tyr
 1 5 10 15
 Leu Asn Phe Phe Gln Leu Leu Val Leu Ala Cys Leu Ser His Phe Cys
 20 25 30
 Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
 35 40 45

Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
50 55 60

Tyr Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
65 70 75 80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
85 90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
100 105 110

Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
115 120 125

Glu His Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr
130 135 140

Pro Ser Ile Ser Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
145 150 155 160

Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro Arg Leu Ala Trp Met
165 170 175

Glu Asp Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Ala Ser Gln Asp
180 185 190

Pro Glu Thr Glu Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met
195 200 205

Thr Thr Asn Arg Ser Phe Val Cys Leu Ile Lys Tyr Gly His Leu Arg
210 215 220

Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
225 230 235 240

Asp Asn Leu Phe Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly
245 250 255

Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg
260 265 270

Glu Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val Arg Pro Val
275 280 285

<210> 228

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 228

Met Ser His Thr Arg Arg Gln Gly Thr Ser Pro Ser Lys Cys Pro Tyr

1	5	10	15
Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Ser Leu Ser His Phe Cys	20	25	30
Ser Gly Val Ile His Met Thr Lys Glu Val Lys Glu Val Ala Thr Leu	35	40	45
Ser Cys Gly Pro Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile	50	55	60
Tyr Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp	65	70	75
Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr	85	90	95
Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly	100	105	110
Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg	115	120	125
Glu His Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr	130	135	140
Pro Ser Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile	145	150	155
Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu	165	170	175
Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp	180	185	190
Pro Gly Thr Glu Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met	195	200	205
Thr Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg	210	215	220
Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro	225	230	235
Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly	245	250	255
Ile Phe Val Ile Cys Cys Leu Thr His Cys Phe Ala Pro Arg Cys Arg	260	265	270
Glu Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val Cys Pro Val	275	280	285

<210> 229

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 229

Met	Ser	His	Thr	Arg	Arg	Gln	Gly	Ile	Ser	Ser	Ser	Lys	Cys	Pro	Tyr	
1				5				10						15		
Leu	Lys	Phe	Phe	Gln	Leu	Leu	Val	Leu	Ala	Cys	Leu	Ser	His	Phe	Cys	
			20					25					30			
Ser	Gly	Val	Ile	His	Val	Thr	Lys	Lys	Val	Lys	Glu	Val	Ala	Thr	Leu	
		35					40					45				
Ser	Cys	Gly	His	Asn	Val	Ser	Val	Glu	Glu	Leu	Ala	Gln	Thr	Arg	Ile	
	50					55					60					
Tyr	Trp	Gln	Lys	Gly	Lys	Lys	Met	Val	Leu	Thr	Met	Met	Ser	Gly	Asp	
65					70					75					80	
Met	Asn	Ile	Trp	Pro	Glu	Cys	Lys	Asn	Arg	Thr	Ile	Phe	Asp	Ile	Thr	
				85					90					95		
Asn	Asn	Leu	Ser	Ile	Val	Ile	Leu	Ala	Leu	Arg	Pro	Ser	Asp	Glu	Gly	
		100						105						110		
Thr	Tyr	Glu	Cys	Ala	Val	Leu	Lys	Tyr	Glu	Lys	Asp	Ala	Phe	Lys	Arg	
		115					120					125				
Glu	His	Leu	Ala	Glu	Val	Thr	Leu	Ser	Val	Lys	Ala	Asp	Phe	Pro	Thr	
		130					135					140				
Pro	Ser	Ile	Ser	Asp	Phe	Glu	Ile	Pro	Thr	Ser	Asn	Ile	Arg	Arg	Ile	
145					150					155					160	
Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Glu	Pro	His	Leu	Phe	Trp	Leu	
				165					170					175		
Glu	Asn	Gly	Glu	Glu	Leu	Asn	Ala	Ile	Asn	Thr	Thr	Ala	Ser	Gln	Asp	
			180					185						190		
Pro	Glu	Thr	Glu	Leu	Tyr	Ala	Val	Ser	Ser	Lys	Leu	Asp	Phe	Asn	Met	
		195					200					205				
Thr	Thr	Asn	His	Ser	Phe	Met	Cys	Leu	Ile	Lys	Tyr	Gly	His	Leu	Arg	
		210				215					220					
Val	Asn	Gln	Thr	Phe	Asn	Trp	Asn	Thr	Pro	Lys	Gln	Glu	His	Phe	Pro	
225					230					235					240	
Asp	Asn	Leu	Leu	Pro	Ser	Trp	Ala	Ile	Thr	Leu	Ile	Ser	Val	Asn	Gly	
				245					250					255		
Ile	Phe	Val	Ile	Cys	Cys	Leu	Thr	Tyr	Cys	Phe	Ala	Pro	Arg	Cys	Arg	
			260					265						270		

Glu Arg Lys Ser Asn Glu Arg Leu Arg Arg Glu Ser Val Arg Pro Val
275 280 285

<210> 230

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 230

Met Gly Tyr Thr Arg Arg Gln Gly Thr Ser Pro Ser Glu Cys Pro Tyr
1 5 10 15

Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Gly Leu Ser His Phe Cys
20 25 30

Ser Gly Val Ile His Met Thr Lys Glu Val Lys Glu Val Ala Thr Leu
35 40 45

Ser Cys Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
50 55 60

His Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
65 70 75 80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
85 90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
100 105 110

Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
115 120 125

Glu His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr
130 135 140

Pro Ser Ile Ser Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
145 150 155 160

Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu
165 170 175

Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp
180 185 190

Pro Glu Thr Gly Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met
195 200 205

Thr Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg
210 215 220

Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
225 230 235 240

Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly
245 250 255

Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg
260 265 270

Glu Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val Arg Pro Val
275 280 285

<210> 231

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 231

Met Ser His Thr Arg Arg Gln Gly Ile Ser Pro Ser Lys Cys Pro Tyr
1 5 10 15

Leu Asn Phe Phe Arg Leu Leu Val Leu Ala Ser Leu Ser His Phe Cys
20 25 30

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
35 40 45

Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
50 55 60

His Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
65 70 75 80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
85 90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
100 105 110

Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
115 120 125

Glu His Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr
130 135 140

Pro Ser Ile Thr Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
145 150 155 160

Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu
165 170 175

Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp

180	185	190
Pro Gly Thr Glu Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met		
195	200	205
Thr Ala Asn His Ser Phe Val Cys Leu Ile Lys Tyr Gly His Leu Arg		
210	215	220
Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro		
225	230	235
Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Ala Asn Gly		
245	250	255
Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg		
260	265	270
Glu Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val Arg Pro Val		
275	280	285

<210> 232
 <211> 300
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<220>
 <221> MOD_RES
 <222> (298)
 <223> Variable amino acid

<400> 232

Met Ser His Thr Arg Arg Gln Gly Ile Ser Pro Ser Lys Cys Pro Tyr		
1	5	10
Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Ser Leu Ser His Phe Cys		
20	25	30
Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu		
35	40	45
Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile		
50	55	60
Tyr Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp		
65	70	75
Met Asn Ile Trp Pro Glu His Lys Asn Arg Thr Ile Phe Asp Ile Thr		
85	90	95
Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly		
100	105	110

Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
 115 120 125
 Glu His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr
 130 135 140
 Pro Ser Ile Ser Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
 145 150 155 160
 Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu
 165 170 175
 Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp
 180 185 190
 Pro Glu Thr Glu Leu Tyr Thr Gly Ser Ser Lys Leu Asp Phe Asn Met
 195 200 205
 Thr Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg
 210 215 220
 Val Asn Gln Thr Phe Ser Trp Asn Thr Pro Lys Gln Glu His Phe Pro
 225 230 235 240
 Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Ala Asn Gly
 245 250 255
 Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg
 260 265 270
 Glu Arg Arg Arg Asn Glu Thr Leu Arg Arg Glu Ser Val Arg Pro Val
 275 280 285
 Trp Gly Thr Lys Leu Lys Phe Lys Pro Xaa Ile Ser
 290 295 300

<210> 233

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 233

Met Gly His Thr Arg Arg Gln Gly Ile Ser Pro Ser Lys Cys Pro Tyr
 1 5 10 15

Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Ser Leu Ser His Phe Cys
 20 25 30

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
 35 40 45

Ser Cys Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile

50	55	60
Tyr Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp		
65	70	75 80
Met Asn Ile Trp Pro Glu His Lys Asn Arg Thr Ile Phe Asp Ile Thr		
	85	90 95
Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly		
	100	105 110
Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg		
	115	120 125
Glu His Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr		
	130	135 140
Pro Ser Ile Thr Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile		
	145	150 155 160
Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Phe Trp Leu		
	165	170 175
Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Ala Ser Gln Asp		
	180	185 190
Pro Glu Thr Glu Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met		
	195	200 205
Thr Ala Asn His Ser Phe Val Cys Leu Ile Lys Tyr Gly His Leu Arg		
	210	215 220
Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro		
	225	230 235 240
Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly		
	245	250 255
Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg		
	260	265 270
Glu Arg Arg Arg Asn Glu Thr Leu Arg Arg Glu Ser Val Arg Pro Val		
	275	280 285

<210> 234

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 234

Met Gly Tyr Thr Arg Arg Gln Gly Thr Ser Pro Ser Lys Cys Pro Tyr
1 5 10 15

Leu Asn Phe Phe Gln Leu Leu Val Leu Ala Ser Leu Ser His Phe Cys
 20 25 30
 Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
 35 40 45
 Ser Cys Gly His Asn Val Pro Val Glu Glu Leu Ala Gln Thr Arg Ile
 50 55 60
 Tyr Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
 65 70 75 80
 Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
 85 90 95
 Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
 100 105 110
 Thr Tyr Gly Cys Val Val Leu Glu Tyr Glu Lys Asp Ala Phe Lys Arg
 115 120 125
 Glu His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr
 130 135 140
 Pro Ser Ile Thr Asp Leu Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
 145 150 155 160
 Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Phe Trp Leu
 165 170 175
 Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Ala Ser Gln Asp
 180 185 190
 Pro Glu Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met
 195 200 205
 Thr Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg
 210 215 220
 Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
 225 230 235 240
 Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Ala Asn Gly
 245 250 255
 Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg
 260 265 270
 Glu Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val His Pro Val
 275 280 285

<210> 235

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 235

Met	Gly	His	Thr	Arg	Arg	Gln	Gly	Ile	Ser	Pro	Ser	Lys	Cys	Pro	Tyr	
1				5				10						15		
Leu	Lys	Phe	Phe	Gln	Leu	Leu	Val	Leu	Ala	Cys	Leu	Ser	His	Phe	Cys	
			20					25						30		
Ser	Gly	Val	Ile	His	Val	Thr	Lys	Glu	Val	Lys	Glu	Val	Ala	Thr	Leu	
		35					40					45				
Ser	Cys	Gly	His	Asn	Val	Ser	Val	Glu	Glu	Leu	Ala	Gln	Thr	Arg	Ile	
	50					55					60					
Tyr	Trp	Gln	Lys	Asp	Lys	Lys	Met	Val	Leu	Thr	Met	Met	Ser	Gly	Asp	
65					70					75					80	
Met	Asn	Ile	Trp	Pro	Glu	Tyr	Lys	Asn	Gln	Thr	Ile	Phe	Asp	Ile	Thr	
				85					90						95	
Asn	Asn	Leu	Ser	Ile	Val	Ile	Leu	Ala	Leu	Arg	Pro	Ser	Asp	Glu	Gly	
			100					105						110		
Thr	Tyr	Glu	Cys	Val	Val	Leu	Lys	Tyr	Glu	Lys	Asp	Ala	Phe	Lys	Gln	
		115					120					125				
Glu	His	Leu	Ala	Glu	Val	Met	Leu	Ser	Val	Lys	Ala	Asp	Phe	Pro	Thr	
		130					135					140				
Pro	Ser	Ile	Ser	Asp	Phe	Glu	Ile	Pro	Pro	Ser	Asn	Ile	Arg	Arg	Ile	
145					150					155					160	
Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Glu	Pro	Arg	Leu	Ala	Trp	Met	
				165					170					175		
Glu	Asp	Gly	Glu	Glu	Leu	Asn	Ala	Ile	Ser	Thr	Thr	Val	Ser	Gln	Asp	
			180					185						190		
Pro	Gly	Thr	Glu	Leu	Cys	Thr	Val	Ser	Ser	Lys	Leu	Asp	Phe	Asn	Met	
			195				200					205				
Thr	Thr	Asn	His	Ser	Phe	Met	Cys	Leu	Ile	Arg	Tyr	Gly	His	Leu	Arg	
		210					215				220					
Val	Asn	Gln	Thr	Phe	Asn	Trp	Asn	Thr	Pro	Lys	Gln	Glu	His	Phe	Pro	
225					230					235					240	
Asp	Asn	Leu	Leu	Pro	Ser	Trp	Ala	Ile	Thr	Leu	Ile	Ser	Val	Lys	Gly	
				245					250					255		
Ile	Phe	Val	Ile	Cys	Cys	Leu	Thr	Tyr	Cys	Phe	Ala	Pro	Arg	Gly	Arg	
			260					265					270			

Glu Arg Lys Ser Asn Gly Arg Leu Arg Arg Glu Ser Val His Pro Val
275 280 285

<210> 236

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<220>

<221> MOD_RES

<222> (200)

<223> Variable amino acid

<400> 236

Met Gly His Thr Arg Arg Gln Gly Thr Ser Pro Ser Lys Cys Pro Tyr
1 5 10 15

Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Gly Leu Ser His Phe Cys
20 25 30

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
35 40 45

Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
50 55 60

His Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
65 70 75 80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
85 90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
100 105 110

Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
115 120 125

Glu His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr
130 135 140

Pro Ser Ile Ser Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
145 150 155 160

Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Phe Trp Leu
165 170 175

Glu Asn Gly Glu Glu Leu Asn Ala Ile Ser Thr Thr Val Ser Gln Asp
180 185 190

Pro Glu Thr Glu Leu Tyr Ala Xaa Ser Ser Lys Leu Asp Phe Asn Met
195 200 205

Thr Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg
210 215 220

Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
225 230 235 240

Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly
245 250 255

Ile Phe Val Ile Cys Cys Pro Thr Tyr Cys Phe Ala Pro Arg Cys Arg
260 265 270

Glu Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val Cys Pro Val
275 280 285

<210> 237

<211> 287

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 237

Met Gly His Thr Arg Arg Gln Gly Ile Ser Pro Ser Lys Cys Pro Tyr
1 5 10 15

Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Cys Leu Ser His Phe Cys
20 25 30

Ser Gly Val Ile Tyr Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
35 40 45

Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
50 55 60

Tyr Trp Gln Lys Glu Lys Lys Met Val Leu Ile Met Met Ser Gly Asp
65 70 75 80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
85 90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
100 105 110

Thr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu
115 120 125

His Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro
130 135 140

Ser Ile Ser Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile Ile
145 150 155 160

Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu
165 170 175

Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro
180 185 190

Gly Thr Glu Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met Thr
195 200 205

Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val
210 215 220

Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro Asp
225 230 235 240

Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly Ile
245 250 255

Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg Glu
260 265 270

Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val Cys Pro Val
275 280 285

<210> 238

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 238

Met Gly His Thr Arg Arg Gln Gly Thr Ser Pro Ser Lys Cys Pro Tyr
1 5 10 15

Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Gly Leu Ser His Phe Cys
20 25 30

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
35 40 45

Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
50 55 60

His Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
65 70 75 80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
85 90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
100 105 110

Thr Tyr Gly Cys Val Val Leu Glu Tyr Glu Lys Asp Ala Phe Lys Arg

115	120	125
Glu His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr		
130	135	140
Pro Ser Ile Ser Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile		
145	150	155 160
Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu		
	165	170 175
Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp		
	180	185 190
Pro Glu Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met		
	195	200 205
Thr Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg		
	210	215 220
Ala Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro		
	225	230 235 240
Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly		
	245	250 255
Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg		
	260	265 270
Glu Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val Arg Pro Val		
	275	280 285

<210> 239

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 239

Met Gly Tyr Thr Arg Arg Gln Gly Thr Ser Pro Ser Lys Cys Pro Tyr			
1	5	10	15
Leu Asn Phe Phe Gln Leu Leu Val Leu Ala Ser Leu Ser His Phe Cys			
	20	25	30
Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu			
	35	40	45
Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile			
	50	55	60
His Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp			
	65	70	75 80

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
 35 40 45
 Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
 50 55 60
 His Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
 65 70 75 80
 Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
 85 90 95
 Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
 100 105 110
 Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
 115 120 125
 Glu His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr
 130 135 140
 Pro Ser Ile Thr Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
 145 150 155 160
 Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro Arg Leu Ala Trp Met
 165 170 175
 Glu Asp Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp
 180 185 190
 Pro Gly Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met
 195 200 205
 Thr Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg
 210 215 220
 Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
 225 230 235 240
 Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly
 245 250 255
 Ile Ser Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg
 260 265 270
 Glu Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val Cys Pro Val
 275 280 285

<210> 241

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 241

Met Ser His Thr Arg Arg Gln Gly Ile Ser Pro Ser Lys Cys Pro Tyr
1 5 10 15

Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Gly Leu Ser His Phe Cys
20 25 30

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
35 40 45

Ser Cys Gly His Asn Val Ser Ala Glu Glu Leu Ala Gln Thr Arg Ile
50 55 60

Tyr Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
65 70 75 80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
85 90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
100 105 110

Thr Tyr Glu Cys Val Val Leu Glu Tyr Glu Lys Asp Ala Phe Lys Arg
115 120 125

Glu His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr
130 135 140

Pro Ser Ile Thr Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile
145 150 155 160

Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro Arg Leu Ala Trp Met
165 170 175

Glu Asp Gly Glu Glu Leu Asn Ala Ile Ser Thr Thr Ala Ser Gln Asp
180 185 190

Pro Glu Thr Glu Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met
195 200 205

Thr Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg
210 215 220

Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
225 230 235 240

Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly
245 250 255

Ile Phe Val Ile Cys Cys Leu Thr His Cys Phe Ala Pro Arg Cys Arg
260 265 270

Glu Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val Cys Pro Val
275 280 285

<210> 242
<211> 288
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
peptide

<400> 242

Met	Gly	His	Thr	Arg	Arg	Gln	Gly	Ile	Ser	Pro	Ser	Lys	Cys	Pro	Tyr	
1				5					10					15		
Leu	Lys	Phe	Phe	Gln	Leu	Leu	Val	Leu	Ala	Gly	Leu	Ser	His	Phe	Cys	
		20						25					30			
Ser	Gly	Val	Ile	His	Val	Thr	Lys	Glu	Val	Lys	Glu	Val	Ala	Thr	Leu	
	35						40					45				
Ser	Cys	Gly	Leu	Asn	Val	Ser	Val	Glu	Glu	Leu	Ala	Gln	Thr	Arg	Ile	
	50					55						60				
His	Trp	Gln	Lys	Glu	Lys	Lys	Met	Val	Leu	Thr	Met	Met	Ser	Gly	Asp	
65				70					75						80	
Met	Asn	Ile	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Phe	Asp	Ile	Thr	
			85						90					95		
Asn	Asn	Leu	Ser	Ile	Val	Ile	Leu	Ala	Leu	Arg	Pro	Ser	Asp	Glu	Gly	
		100						105						110		
Thr	Tyr	Glu	Cys	Val	Val	Leu	Lys	Tyr	Glu	Lys	Asp	Ala	Phe	Lys	Arg	
	115						120					125				
Glu	His	Leu	Ala	Glu	Val	Met	Leu	Ser	Val	Lys	Ala	Asp	Phe	Pro	Thr	
	130					135						140				
Pro	Ser	Ile	Thr	Asp	Phe	Glu	Ile	Pro	Pro	Ser	Asn	Ile	Arg	Arg	Ile	
145				150						155					160	
Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Glu	Pro	His	Leu	Ser	Trp	Leu	
			165						170					175		
Glu	Asn	Gly	Glu	Glu	Leu	Asn	Ala	Ile	Asn	Thr	Thr	Val	Ser	Gln	Asp	
		180						185						190		
Pro	Gly	Thr	Glu	Leu	Tyr	Thr	Val	Ser	Ser	Lys	Leu	Asp	Phe	Asn	Met	
		195					200					205				
Thr	Thr	Asn	His	Ser	Phe	Met	Cys	Leu	Ile	Lys	Tyr	Gly	His	Leu	Arg	
	210					215						220				
Val	Asn	Gln	Thr	Phe	Asn	Trp	Asn	Thr	Pro	Lys	Gln	Glu	His	Phe	Pro	
225				230						235					240	
Asp	Asn	Leu	Leu	Pro	Ser	Trp	Ala	Ile	Thr	Leu	Ile	Ser	Ala	Asn	Gly	
			245						250					255		

Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg
260 265 270

Glu Arg Lys Ser Asn Glu Arg Leu Arg Arg Glu Ser Val Cys Pro Val
275 280 285

<210> 243

<211> 287

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 243

Met Gly Tyr Thr Arg Arg Gln Gly Ile Ser Pro Ser Lys Cys Pro Tyr
1 5 10 15

Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Cys Leu Ser His Phe Cys
20 25 30

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
35 40 45

Ser Cys Gly His Asn Val Ser Asp Glu Glu Leu Ala Gln Thr Arg Ile
50 55 60

His Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
65 70 75 80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
85 90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
100 105 110

Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
115 120 125

Glu His Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr
130 135 140

Pro Ser Ile Ser Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
145 150 155 160

Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu
165 170 175

Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp
180 185 190

Pro Gly Thr Glu Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met
195 200 205

Thr Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg
210 215 220

Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
225 230 235 240

Asp Asn Leu Leu Pro Ser Ala Ile Thr Leu Ile Ser Ala Asn Gly Ile
245 250 255

Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg Glu
260 265 270

Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Ile His Pro Val
275 280 285

<210> 244

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 244

Met Gly Tyr Thr Arg Arg Gln Gly Ile Ser Pro Ser Lys Cys Pro Tyr
1 5 10 15

Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Gly Leu Ser His Leu Cys
20 25 30

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
35 40 45

Pro Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
50 55 60

His Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
65 70 75 80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
85 90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
100 105 110

Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
115 120 125

Glu His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr
130 135 140

Pro Ser Ile Thr Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
145 150 155 160

Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Phe Trp Leu

165	170	175
Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp 180 185 190		
Pro Gly Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met 195 200 205		
Thr Thr Asn His Asn Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg 210 215 220		
Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro 225 230 235 240		
Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly 245 250 255		
Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg 260 265 270		
Glu Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val Arg Pro Val 275 280 285		

<210> 245
 <211> 288
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 245
 Met Gly His Thr Arg Arg Gln Gly Ile Ser Pro Ser Lys Cys Pro Tyr
 1 5 10 15
 Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Gly Leu Ser His Leu Cys
 20 25 30
 Ser Gly Val Ile His Met Thr Lys Glu Val Lys Glu Val Ala Thr Leu
 35 40 45
 Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
 50 55 60
 Tyr Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
 65 70 75 80
 Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
 85 90 95
 Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
 100 105 110
 Thr Tyr Glu Cys Val Ala Leu Lys Tyr Glu Lys Asp Ala Phe Lys Gln
 115 120 125

Glu His Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr
 130 135 140
 Pro Ser Ile Ser Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
 145 150 155 160
 Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro Arg Leu Ala Trp Met
 165 170 175
 Glu Asp Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp
 180 185 190
 Pro Glu Thr Glu Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met
 195 200 205
 Thr Ala Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg
 210 215 220
 Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
 225 230 235 240
 Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly
 245 250 255
 Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg
 260 265 270
 Glu Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val Cys Pro Val
 275 280 285

<210> 246

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 246

Met Gly His Thr Arg Arg Gln Gly Ile Ser Pro Ser Lys Cys Pro Tyr
 1 5 10 15

Leu Lys Phe Phe Gln Leu Leu Gly Leu Ala Cys Leu Ser His Phe Cys
 20 25 30

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
 35 40 45

Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
 50 55 60

His Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
 65 70 75 80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
 85 90 95
 Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Leu Ser Asp Glu Gly
 100 105 110
 Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
 115 120 125
 Glu His Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr
 130 135 140
 Pro Ser Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile
 145 150 155 160
 Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Phe Trp Leu
 165 170 175
 Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Ala Ser Gln Asp
 180 185 190
 Pro Glu Thr Glu Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met
 195 200 205
 Thr Thr Asn Arg Ser Phe Val Cys Leu Ile Lys Tyr Gly His Leu Arg
 210 215 220
 Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
 225 230 235 240
 Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly
 245 250 255
 Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg
 260 265 270
 Glu Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val Arg Pro Val
 275 280 285

<210> 247

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 247

Met Ser His Thr Arg Arg Gln Gly Ile Ser Pro Ser Lys Cys Pro Tyr
 1 5 10 15

Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Cys Leu Ser His Phe Cys
 20 25 30

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu

35

40

45

Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
50 55 60

His Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
65 70 75 80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
85 90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
100 105 110

Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
115 120 125

Lys His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr
130 135 140

Pro Ser Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile
145 150 155 160

Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Phe Trp Leu
165 170 175

Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Ala Ser Gln Asp
180 185 190

Pro Glu Thr Glu Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met
195 200 205

Thr Thr Asn Arg Ser Phe Val Cys Leu Ile Lys Tyr Gly His Leu Arg
210 215 220

Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
225 230 235 240

Asn Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly
245 250 255

Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg
260 265 270

Glu Arg Arg Arg Asn Glu Thr Leu Arg Arg Glu Ser Val His Pro Val
275 280 285

<210> 248

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 248

Met Gly His Thr Arg Arg Gln Gly Thr Ser Pro Ser Lys Cys Pro Tyr
1 5 10 15

Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Gly Leu Ser His Phe Cys
20 25 30

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
35 40 45

Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
50 55 60

Tyr Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
65 70 75 80

Met Asn Ile Trp Pro Glu His Lys Asn Arg Thr Ile Phe Asp Ile Thr
85 90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
100 105 110

Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
115 120 125

Glu His Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr
130 135 140

Pro Ser Ile Thr Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile
145 150 155 160

Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu
165 170 175

Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp
180 185 190

Pro Gly Thr Glu Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met
195 200 205

Thr Thr Asn Arg Ser Phe Val Cys Leu Ile Lys Tyr Gly His Leu Arg
210 215 220

Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
225 230 235 240

Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly
245 250 255

Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg
260 265 270

Glu Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val Arg Pro Val
275 280 285

<210> 249

<211> 288
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 249

Met	Ser	His	Thr	Arg	Arg	Gln	Gly	Ile	Ser	Pro	Ser	Lys	Cys	Pro	Tyr	
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Leu	Lys	Phe	Phe	Gln	Leu	Leu	Val	Leu	Ala	Ser	Leu	Ser	His	Phe	Cys	
		20					25						30			
Ser	Gly	Val	Ile	His	Val	Thr	Lys	Glu	Val	Lys	Glu	Val	Ala	Thr	Leu	
	35					40					45					
Ser	Cys	Gly	His	Asn	Val	Ser	Val	Glu	Glu	Leu	Ala	Gln	Thr	Arg	Ile	
	50				55					60						
Tyr	Trp	Gln	Lys	Glu	Lys	Lys	Met	Val	Leu	Thr	Met	Met	Pro	Gly	Asp	
65				70					75					80		
Met	Asn	Ile	Trp	Pro	Glu	Tyr	Lys	Asn	Arg	Thr	Ile	Phe	Asp	Ile	Thr	
			85					90						95		
Asn	Asn	Leu	Ser	Ile	Val	Ile	Leu	Ala	Leu	Arg	Pro	Ser	Asp	Glu	Gly	
		100					105						110			
Thr	Tyr	Glu	Cys	Val	Val	Leu	Arg	Tyr	Glu	Lys	Asp	Ala	Phe	Lys	Arg	
	115					120						125				
Glu	His	Leu	Ala	Glu	Val	Thr	Leu	Ser	Val	Lys	Ala	Asp	Phe	Pro	Thr	
	130					135					140					
Pro	Ser	Ile	Ser	Asp	Phe	Glu	Ile	Pro	Thr	Ser	Asn	Ile	Arg	Arg	Ile	
145				150						155				160		
Ile	Cys	Ser	Thr	Ser	Gly	Gly	Phe	Pro	Glu	Pro	His	Leu	Ser	Trp	Leu	
			165						170					175		
Glu	Asn	Gly	Glu	Glu	Leu	Asn	Ala	Ile	Asn	Thr	Thr	Ala	Ser	Gln	Asp	
		180					185						190			
Pro	Glu	Thr	Glu	Leu	Tyr	Thr	Val	Ser	Ser	Lys	Leu	Asp	Phe	Asn	Met	
	195					200						205				
Thr	Thr	Asn	Arg	Ser	Phe	Val	Cys	Leu	Ile	Lys	Tyr	Gly	His	Leu	Arg	
	210					215					220					
Val	Asn	Gln	Thr	Phe	Asn	Trp	Asn	Thr	Pro	Lys	Gln	Glu	His	Phe	Pro	
225				230						235					240	
Asp	Asn	Leu	Leu	Pro	Ser	Trp	Ala	Ile	Thr	Leu	Ile	Ser	Ala	Asn	Gly	
			245					250						255		

Ile Phe Val Ile Cys Cys Leu Thr His Cys Phe Ala Pro Arg Cys Arg
260 265 270

Glu Arg Lys Ser Asn Glu Arg Leu Arg Arg Glu Ser Val Arg Pro Val
275 280 285

<210> 250

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 250

Met Ser His Thr Arg Arg Gln Gly Ile Ser Pro Ser Lys Cys Pro Tyr
1 5 10 15

Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Gly Leu Ser His Phe Cys
20 25 30

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
35 40 45

Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
50 55 60

His Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Gly
65 70 75 80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
85 90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
100 105 110

Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
115 120 125

Glu His Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr
130 135 140

Pro Ser Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile
145 150 155 160

Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu
165 170 175

Glu Asn Gly Glu Glu Leu Asn Ala Ile Ser Thr Thr Val Ser Gln Asp
180 185 190

Pro Gly Thr Glu Leu Tyr Ala Val Ser Ser Lys Ile Asp Phe Asn Met
195 200 205

Thr Thr Asn Arg Ser Phe Val Cys Leu Ile Lys Tyr Gly His Leu Arg

210 215 220
 Val Asn Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro
 225 230 235 240
 Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly
 245 250 255
 Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg
 260 265 270
 Glu Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val Arg Pro Val
 275 280 285

<210>. 251
 <211> 288
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 251
 Met Gly Tyr Thr Arg Arg Gln Gly Thr Ser Pro Ser Lys Cys Pro Tyr
 1 5 10 15
 Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Cys Leu Ser His Phe Cys
 20 25 30
 Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
 35 40 45
 Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
 50 55 60
 Tyr Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
 65 70 75 80
 Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
 85 90 95
 Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
 100 105 110
 Thr Tyr Glu Cys Val Val Leu Glu Tyr Glu Lys Asp Ala Phe Lys Arg
 115 120 125
 Glu His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr
 130 135 140
 Pro Ser Ile Ser Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
 145 150 155 160
 Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu
 165 170 175

Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp
180 185 190

Pro Gly Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met
195 200 205

Thr Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg
210 215 220

Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
225 230 235 240

Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly
245 250 255

Ile Phe Val Ile Cys Cys Leu Ala Tyr Cys Phe Ala Pro Arg Cys Arg
260 265 270

Gly Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val Arg Pro Val
275 280 285

<210> 252

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 252

Met Gly His Thr Arg Arg Gln Gly Thr Ser Pro Ser Lys Cys Pro Tyr
1 5 10 15

Leu Asn Phe Phe Gln Leu Leu Val Leu Ala Cys Leu Ser His Phe Cys
20 25 30

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
35 40 45

Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
50 55 60

Tyr Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
65 70 75 80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
85 90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
100 105 110

Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
115 120 125

Glu His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr
 130 135 140
 Pro Ser Ile Ser Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
 145 150 155 160
 Ile Cys Ser Thr Pro Gly Gly Phe Pro Glu Pro Arg Leu Ala Trp Met
 165 170 175
 Glu Asp Gly Glu Glu Leu Asn Ala Ile Ser Thr Thr Val Ser Gln Asp
 180 185 190
 Pro Gly Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met
 195 200 205
 Thr Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg
 210 215 220
 Val Asn Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro
 225 230 235 240
 Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Lys Gly
 245 250 255
 Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Trp Arg
 260 265 270
 Glu Arg Lys Ser Asn Glu Arg Leu Arg Arg Glu Ser Val Arg Pro Val
 275 280 285

<210> 253

<211> 880

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 253

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ctgctcttgg	cgctggcggg	tctccaattc	tcttcaggta	tcagccaggt	caccaagtcg	120
gtgaaagaaa	tggcagcact	gtcctgtgat	tacaacattt	ctatcgatga	actggcgaga	180
atgcgcatat	actggcagaa	ggaccaacag	atggtgctga	gcatcatctc	tgggcaagtg	240
gaagtgtggc	ctgagtacaa	aaaccgcacc	ttccccgaca	tcattaacaa	cctctccctt	300
atgatcctgg	cactgcgcct	gtcggacaag	ggcacctaca	cctgcgtggt	tcagaagaat	360
gagaacgggt	ctttcagacg	ggagcacctg	acctccgtga	cactgtccat	cagagctgac	420
ttccctgtcc	ctagcataaa	tgatcttggg	aatccatctc	ctaataatcag	aaggctaatt	480
tgctcaacct	ctggagggtt	tccaaggccc	cacctctact	ggttggaaaa	tggagaagaa	540
ttaaattgcta	ccaacacaac	actgtcccaa	gatcctgaaa	ccaagctcta	catgattagc	600
agtgaactgg	atttcaacat	gacaagcaat	cacagcttct	tgtgtcttgt	caagtatgga	660
gacttaacag	tgtcacagac	cttctactgg	caagaatcca	aaccaacccc	ttctgctaatt	720
cagcacctga	cctggaccat	tattatccca	gtctcagcat	ttgggatttc	tgtgatcatt	780
gcagttatac	taacatgcct	gacctgcaga	aatgctgcaa	tacgcagaca	gagaagggag	840
aatgaagtgg	aaatgcaaag	ttgctctcag	tctccatgag			880

<210> 254
<211> 891
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 254

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atgggtcaca caatggagtg gggatcacta ccaccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgcg 120
acaaaaagag tgaaagaaac agtaatgcta tctgtgatt acagcacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcttgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg atttgaaagg ggcttataaa ctggagcacc tgacttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt ttccaaggc cccacctcta ctggttggaa 540
aatggagaag aattaaatgc taccaacaca aactgtccc aagatcctga aaccaagctc 600
tacatgatta gcagtgaact ggatttcaac atgacaagca atcacagctt cttgtgtctt 660
gtcaagtatg gagacttaac agtgtcacag accttctact ggcaagaatc caaaccaacc 720
ccttctgcta atcagcacct gacctggacc attattatcc cagtctcagc atttgggatt 780
tctgtgatca ttgcagttat actaacatgc ctgacctgca gaaatgctgc aatacgcaga 840
cagagaaggg agaatgaagt ggaaatgcaa agttgctctc agtctccata g 891
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<210> 255
<211> 889
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 255

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atggggccaca caatgaagtg gggatcacta ccaccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcttgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgcgtggtt 360
cagaagaatg agaacgggtc ttccagacgg gagcacctga cctccgtgag gttaatgatc 420
agagctgact tccctgtccc taccataaat gatcttggaa atccatctcc taatatcaga 480
aggctaattt gctcaacctc tggaggtttt ccaaggcccc acctctactg gttggaaaat 540
ggagaagaat taaatgctac caacacaaca ctgccccaaag atcctgaaac caagctctac 600
atgattagca gtgaactgga tttcaacatg acaagcaatc acagcttctt gtgtcttgtc 660
aagtatggag acttaacagt gtcacagacc ttctactggc aagaatccaa accaaccctt 720
tctgctaata agcacctgac ctggaccatt attatcccag tctcagcatt tgggatttct 780
gtgatcattg cagttatact aacatgcctg acctgcagaa atgctgcaat acgcagacag 840
agaagggaga atgaagtgga aatgcaaagt tgctctcagt ctccatgag 889
```

<210> 256
<211> 888

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 256

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cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaagaaac agtaatgcta tctgtgatt acagcacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcaactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacaagg gcacctacac ctgcgtggtt 360
cagaagaatg agaacgggtc tttcagacgg gagcacctga ctccgtgag gttaatgac 420
agagctgact tccctgtccc taccataaat gatcttggaa atccatctcc taatatcaga 480
aggctaattt gctcaacctc tggaggtttt ccaaggcccc acctctactg gttggaaaaat 540
ggagaagaat taaatgctac caacacaaca ctgtcccaag atcctgaaac caagctctac 600
atgattagca gtgaactgga tttcaacatg acaagcaatc acagcttctt gtgtcttgtc 660
aagtatggag acttaacagt gtcgcagacc ttctactggc aagaatccaa accaaccct 720
tctgctaadc agcacctgac ctggaccatt attatcccag tctcagcatt tgggatttct 780
tgatcattg cagttatact aacatgcctg acctgcagaa atgctgcaat acgcagacag 840
agaagggaga atgaagtga gatgcaaagt tgctctcagt ctccatag 888
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<210> 257

<211> 891

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 257

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cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaagaaac agtaatgcta tctgtgatt acagcacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcaactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg atttgaaagg ggcttataaa ctggagcacc tgacttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataac 480
agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctcta ctggttgga 540
aatggagaag aattaaatgc taccaacaca acactgtccc aagatcctga aaccaagctc 600
tacatgatta gcagtgaact ggatttcaac atgacaagca atcacagctt cttgtgtctt 660
gtcaagtatg gagacttaac agtgtcacag accttctact ggcaagaatc caaaccaacc 720
ccttctgcta atcagcacct gacctggacc attattatcc cagtctcagc atttgggatt 780
tctgtgatca ttgcagttat actaacatgc ctgacctgca gaaatgctgc aatacgcaga 840
cagagaaggg agaatgaagt ggaaatgcaa agttgctctc agtctccatg a 891
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<210> 258

<211> 910

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 258

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atggggtcaca caatgaagtg gggatcacta ccacccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acagcacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcaactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacaagg gcacctacac ctgcgtggtt 360
cagaagaatg agaacgggtc tttcagacgg gagcacctga cctccgtgac actgtccatc 420
agagctgact tccctgtccc tagcataact gacattggac atcccgcccc taatgtgaaa 480
aggataagat gctccgcctc tggaggtttt ccagagcctc gcctctactg gttggaaaat 540
ggagaagaat taaatgctac caacacaaca gtttcccaag atcctggaac tgagctctac 600
atgatagca gtgaactgga tttcaatgtg acaataaacc acagcatcgt gtgtctctac 660
aaatacgggg agctgtcggg gtcacagatc ttcccttggg gcaaacccaa gcaggagcct 720
cccattgate agcttccatt ctgggtcatt atcccagtaa gtggtgcttt ggtgctcact 780
gcggtagttc tctactgcct ggcctgcaga catgttgca ggtggaaaag aacaagaagg 840
aatgaagaga cagtgggaac tgaaaggctg tcccctatct acttaggctc tgcgcaatcc 900
tcgggctgag                                     910
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<210> 259

<211> 888

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 259

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atggatcaca caatgaagtg gggatcacta ccacccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
acaaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcaactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacaagg gcacctacac ctgcgtggtt 360
cagaagaatg agaacgggtc tttcagacgg gagcacctga cctccgtgac actgtccatc 420
agagctgact ttcctgtccc taccataaat gatcttggaa atccatctcc taatatcaga 480
aggctaattt gctcaacctc tggaggtttt ccaaggcccc acctctactg gttggaaaat 540
ggagaagaat taaatgctac caacacaaca ctgtcccaag atcctgaaac caagctctac 600
atgattagca gtgaactgga tttcaacatg acaagcaatc acagcttctt gtgtcttctc 660
aagtatggag acttaacagt gtcacagacc ttctactggc aagaatcaa accaaccctc 720
tctgctaatac agcacctgac ctggaccatt attatcccg tctcagcatt tgggatttct 780
gtgatcattg cagttatact aacatgcctg acctgcagaa atgctgcaat acgcagacag 840
agaagggaga atgaagtgga aatgcaaagt tgctctcagt ctccatag 888
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<210> 260

<211> 888

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

nucleotide sequence

<400> 260

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atgggtcaca caatgaagtg gggatcacta ccacccaagc gcccatgcct ctggctctct 60
cagctcttgg tgcccactgg tcttttttac ttctgttcag gtatcacccc aaagagtgtg 120
accaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcgcctg tcggacaagg gcacctacac ctgctgtggt 360
cagaagaatg agaacgggtc tttcagacgg gagcacctga cctccgtgac actgtccatc 420
agagctgact tccctgtccc taccataaat gatcttggaa atccatctcc taatatcaga 480
aggctaattt gctcaacctc tggaggtttt ccaaggcccc acctctactg gttggaaaaat 540
ggagaagaat taaatgtctac caacacaaca ctgtcccaag atcctgaaac caagctctac 600
atgattagca gtgaactgga tttcaacatg acaagcaatc acagcttctt gtgtcttgtc 660
aagtatggag acttaacagt gtcacagacc ctctactggc aagaatccaa accaaccctc 720
tctgtcaatc agcacctgac ctggaccatt attatcccag tctcagcatt tgggatttct 780
gtgatcattg cagttatact aacatgcctg acctgcagaa atgctgcaat acgcagacag 840
agaagggaga atgaagtgga aatgcaaagt tgctctcagt ctccatga 888

```

<210> 261

<211> 891

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic nucleotide sequence

<400> 261

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atgggtcaca cagtgaagtg gggatcacta ccacccaagc gcccatgcct ctggctctct 60
cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
accaaaagag tgaaagaaac agtaatgcta tcctgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcactgacat gaacgataac 300
ccccgtattg tgatcctggc tctgcccctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg atttgaaagg ggcttataaa ctggagcacc tgacttccgt gaggttaatg 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccac tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctcta ctggttgga 540
aatggagaag aattaaatgc taccaacaca acactgtccc aagatcctga aaccaagctc 600
tacatgatta gcagtgaact ggatttcaac atgacaagca atcacagctt cttgtgtctt 660
gtcaagtatg gagacttaac agtgtcacag accttctact ggcaagaatc caaaccaacc 720
ccttctgcta atcagcacct gacctggacc attattatcc cagtctcagc atttgggatt 780
tctgtgatca ttgcagttat actaacatgc ctgacctgca gaaatgctgc aataagcaga 840
cagagaaggg agaatgaagt ggaaatgcaa agttgctctc agtctccatg a 891

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<210> 262

<211> 910

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic nucleotide sequence

<400> 262

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 cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
 accaaaagag tgaaagaaac agtaatgcta tcctgtgatt acagcacatc cactgaagaa 180
 ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
 ggaaaagtgc aggtgtggcc tgagtacaaa aaccgcacct tccccgacat cattaacaac 300
 ctctccctta tgatcctggc actgcgcctg tcggacaggg gcacctacac ctgctgggtt 360
 cagaagaatg agaacgggtc ttccagacgg gagcacctga cctccgtgac actgtccatc 420
 agagctgact tccctgtccc tagcataact gacattggac atcccgcccc taatgtgaaa 480
 aggataagat gtcctgcctc tggaggtttt ccagagcctc gcctcgctg gatggaagat 540
 ggagaagaac taaacccgt caacacgacg gttgaccagg atttgacac ggagctctac 600
 agcgtcggca gtgaactgga tttcaatgtg acaaataacc acagcatcgt gtgtctcatc 660
 aaatacgggg agctgtcggg gtcacagatc ttccttgga gcaaacccaa gcaggagcct 720
 cccattgatc agcttccatt ctgggtcatt atcccagtaa gtggtgcttt ggtgctcact 780
 gcggtagtgc tctactgcct ggcccgacga catgttgca ggtggaaaag aacaagaagg 840
 aatgaagaga cagtgggaac tgaaaggctg tccctatct acttaggctc tgcgcaatcc 900
 tcgggctgag 910

<210> 263

<211> 292

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 263

Met Gly His Thr Leu Arg Pro Gly Thr Pro Leu Pro Arg Cys Leu His
 1 5 10 15
 Leu Lys Leu Cys Leu Leu Leu Ala Leu Ala Gly Leu His Phe Ser Ser
 20 25 30
 Gly Ile Ser Gln Val Thr Lys Ser Val Lys Glu Met Ala Ala Leu Ser
 35 40 45
 Cys Asp Tyr Asn Ile Ser Ile Asp Glu Leu Ala Arg Met Arg Ile Tyr
 50 55 60
 Trp Gln Lys Asp Gln Gln Met Val Leu Ser Ile Ile Ser Gly Gln Val
 65 70 75 80
 Glu Val Trp Pro Glu Tyr Lys Asn Arg Thr Phe Pro Asp Ile Ile Asn
 85 90 95
 Asn Leu Ser Leu Met Ile Leu Ala Leu Arg Leu Ser Asp Lys Gly Thr
 100 105 110
 Tyr Thr Cys Val Val Gln Lys Asn Glu Asn Gly Ser Phe Arg Arg Glu
 115 120 125
 His Leu Thr Ser Val Thr Leu Ser Ile Arg Ala Asp Phe Pro Val Pro
 130 135 140
 Ser Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile Arg Arg Leu Ile
 145 150 155 160

Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu Tyr Trp Leu Glu
 165 170 175
 Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Leu Ser Gln Asp Pro
 180 185 190
 Glu Thr Lys Leu Tyr Met Ile Ser Ser Glu Leu Asp Phe Asn Met Thr
 195 200 205
 Ser Asn His Ser Phe Leu Cys Leu Val Lys Tyr Gly Asp Leu Thr Val
 210 215 220
 Ser Gln Thr Phe Tyr Trp Gln Glu Ser Lys Pro Thr Pro Ser Ala Asn
 225 230 235 240
 Gln His Leu Thr Trp Thr Ile Ile Ile Pro Val Ser Ala Phe Gly Ile
 245 250 255
 Ser Val Ile Ile Ala Val Ile Leu Thr Cys Leu Thr Cys Arg Asn Ala
 260 265 270
 Ala Ile Arg Arg Gln Arg Arg Glu Asn Glu Val Glu Met Gln Ser Cys
 275 280 285
 Ser Gln Ser Pro
 290

<210> 264
 <211> 296
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 264
 Met Gly His Thr Met Glu Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
 1 5 10 15
 Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
 20 25 30
 Ser Gly Ile Thr Pro Lys Ser Ala Thr Lys Arg Val Lys Glu Thr Val
 35 40 45
 Met Leu Ser Cys Asp Tyr Ser Thr Ser Thr Glu Glu Leu Thr Ser Leu
 50 55 60
 Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
 65 70 75 80
 Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
 85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
 100 105 110
 Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Asp Leu Lys Gly Ala
 115 120 125
 Tyr Lys Leu Glu His Leu Thr Ser Val Arg Leu Met Ile Arg Ala Asp
 130 135 140
 Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
 145 150 155 160
 Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
 165 170 175
 Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Leu
 180 185 190
 Ser Gln Asp Pro Glu Thr Lys Leu Tyr Met Ile Ser Ser Glu Leu Asp
 195 200 205
 Phe Asn Met Thr Ser Asn His Ser Phe Leu Cys Leu Val Lys Tyr Gly
 210 215 220
 Asp Leu Thr Val Ser Gln Thr Phe Tyr Trp Gln Glu Ser Lys Pro Thr
 225 230 235 240
 Pro Ser Ala Asn Gln His Leu Thr Trp Thr Ile Ile Ile Pro Val Ser
 245 250 255
 Ala Phe Gly Ile Ser Val Ile Ile Ala Val Ile Leu Thr Cys Leu Thr
 260 265 270
 Cys Arg Asn Ala Ala Ile Arg Arg Gln Arg Arg Glu Asn Glu Val Glu
 275 280 285
 Met Gln Ser Cys Ser Gln Ser Pro
 290 295

<210> 265

<211> 295

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 265

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
 1 5 10 15
 Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
 20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val

35

40

45

Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
 50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
 65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
 85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
 100 105 110

Ser Gly Thr Tyr Thr Cys Val Val Gln Lys Asn Glu Asn Gly Ser Phe
 115 120 125

Arg Arg Glu His Leu Thr Ser Val Arg Leu Met Ile Arg Ala Asp Phe
 130 135 140

Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile Arg
 145 150 155 160

Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu Tyr
 165 170 175

Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Leu Pro
 180 185 190

Gln Asp Pro Glu Thr Lys Leu Tyr Met Ile Ser Ser Glu Leu Asp Phe
 195 200 205

Asn Met Thr Ser Asn His Ser Phe Leu Cys Leu Val Lys Tyr Gly Asp
 210 215 220

Leu Thr Val Ser Gln Thr Phe Tyr Trp Gln Glu Ser Lys Pro Thr Pro
 225 230 235 240

Ser Ala Asn Gln His Leu Thr Trp Thr Ile Ile Ile Pro Val Ser Ala
 245 250 255

Phe Gly Ile Ser Val Ile Ile Ala Val Ile Leu Thr Cys Leu Thr Cys
 260 265 270

Arg Asn Ala Ala Ile Arg Arg Gln Arg Arg Glu Asn Glu Val Glu Met
 275 280 285

Gln Ser Cys Ser Gln Ser Pro
 290 295

<210> 266

<211> 295

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 266

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15
Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30
Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45
Met Leu Ser Cys Asp Tyr Ser Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60
Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80
Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
85 90 95
Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
100 105 110
Lys Gly Thr Tyr Thr Cys Val Val Gln Lys Asn Glu Asn Gly Ser Phe
115 120 125
Arg Arg Glu His Leu Thr Ser Val Arg Leu Met Ile Arg Ala Asp Phe
130 135 140
Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile Arg
145 150 155 160
Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu Tyr
165 170 175
Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Leu Ser
180 185 190
Gln Asp Pro Glu Thr Lys Leu Tyr Met Ile Ser Ser Glu Leu Asp Phe
195 200 205
Asn Met Thr Ser Asn His Ser Phe Leu Cys Leu Val Lys Tyr Gly Asp
210 215 220
Leu Thr Val Ser Gln Thr Phe Tyr Trp Gln Glu Ser Lys Pro Thr Pro
225 230 235 240
Ser Ala Asn Gln His Leu Thr Trp Thr Ile Ile Ile Pro Val Ser Ala
245 250 255
Phe Gly Ile Ser Val Ile Ile Ala Val Ile Leu Thr Cys Leu Thr Cys
260 265 270
Arg Asn Ala Ala Ile Arg Arg Gln Arg Arg Glu Asn Glu Val Glu Met
275 280 285

Gln Ser Cys Ser Gln Ser Pro
290 295

<210> 267
<211> 296
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 267

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15
Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30
Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45
Met Leu Ser Cys Asp Tyr Ser Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60
Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80
Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
85 90 95
Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
100 105 110
Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Asp Leu Lys Gly Ala
115 120 125
Tyr Lys Leu Glu His Leu Thr Ser Val Arg Leu Met Ile Arg Ala Asp
130 135 140
Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
145 150 155 160
Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
165 170 175
Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Leu
180 185 190
Ser Gln Asp Pro Glu Thr Lys Leu Tyr Met Ile Ser Ser Glu Leu Asp
195 200 205
Phe Asn Met Thr Ser Asn His Ser Phe Leu Cys Leu Val Lys Tyr Gly
210 215 220

Asp Leu Thr Val Ser Gln Thr Phe Tyr Trp Gln Glu Ser Lys Pro Thr
225 230 235 240

Pro Ser Ala Asn Gln His Leu Thr Trp Thr Ile Ile Ile Pro Val Ser
245 250 255

Ala Phe Gly Ile Ser Val Ile Ile Ala Val Ile Leu Thr Cys Leu Thr
260 265 270

Cys Arg Asn Ala Ala Ile Arg Arg Gln Arg Arg Glu Asn Glu Val Glu
275 280 285

Met Gln Ser Cys Ser Gln Ser Pro
290 295

<210> 268

<211> 302

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 268

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Ser Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
100 105 110

Lys Gly Thr Tyr Thr Cys Val Val Gln Lys Asn Glu Asn Gly Ser Phe
115 120 125

Arg Arg Glu His Leu Thr Ser Val Thr Leu Ser Ile Arg Ala Asp Phe
130 135 140

Pro Val Pro Ser Ile Thr Asp Ile Gly His Pro Ala Pro Asn Val Lys
145 150 155 160

Arg Ile Arg Cys Ser Ala Ser Gly Gly Phe Pro Glu Pro Arg Leu Tyr

Lys Gly Thr Tyr Thr Cys Val Val Gln Lys Asn Glu Asn Gly Ser Phe
 115 120 125
 Arg Arg Glu His Leu Thr Ser Val Thr Leu Ser Ile Arg Ala Asp Phe
 130 135 140
 Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile Arg
 145 150 155 160
 Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu Tyr
 165 170 175
 Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Leu Ser
 180 185 190
 Gln Asp Pro Glu Thr Lys Leu Tyr Met Ile Ser Ser Glu Leu Asp Phe
 195 200 205
 Asn Met Thr Ser Asn His Ser Phe Leu Cys Leu Val Lys Tyr Gly Asp
 210 215 220
 Leu Thr Val Ser Gln Thr Phe Tyr Trp Gln Glu Ser Lys Pro Thr Pro
 225 230 235 240
 Ser Ala Asn Gln His Leu Thr Trp Thr Ile Ile Ile Pro Val Ser Ala
 245 250 255
 Phe Gly Ile Ser Val Ile Ile Ala Val Ile Leu Thr Cys Leu Thr Cys
 260 265 270
 Arg Asn Ala Ala Ile Arg Arg Gln Arg Arg Glu Asn Glu Val Glu Met
 275 280 285
 Gln Ser Cys Ser Gln Ser Pro
 290 295

<210> 270

<211> 295

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 270

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
 1 5 10 15
 Leu Trp Leu Ser Gln Leu Leu Val Pro Thr Gly Leu Phe Tyr Phe Cys
 20 25 30
 Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
 35 40 45

Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
 50 55 60
 Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
 65 70 75 80
 Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
 85 90 95
 Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
 100 105 110
 Lys Gly Thr Tyr Thr Cys Val Val Gln Lys Asn Glu Asn Gly Ser Phe
 115 120 125
 Arg Arg Glu His Leu Thr Ser Val Thr Leu Ser Ile Arg Ala Asp Phe
 130 135 140
 Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile Arg
 145 150 155 160
 Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu Tyr
 165 170 175
 Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Leu Ser
 180 185 190
 Gln Asp Pro Glu Thr Lys Leu Tyr Met Ile Ser Ser Glu Leu Asp Phe
 195 200 205
 Asn Met Thr Ser Asn His Ser Phe Leu Cys Leu Val Lys Tyr Gly Asp
 210 215 220
 Leu Thr Val Ser Gln Thr Leu Tyr Trp Gln Glu Ser Lys Pro Thr Pro
 225 230 235 240
 Ser Ala Asn Gln His Leu Thr Trp Thr Ile Ile Ile Pro Val Ser Ala
 245 250 255
 Phe Gly Ile Ser Val Ile Ile Ala Val Ile Leu Thr Cys Leu Thr Cys
 260 265 270
 Arg Asn Ala Ala Ile Arg Arg Gln Arg Arg Glu Asn Glu Val Glu Met
 275 280 285
 Gln Ser Cys Ser Gln Ser Pro
 290 295

<210> 271

<211> 296

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 271

Met Gly His Thr Val Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Pro Leu Ser Asp
100 105 110

Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Asp Leu Lys Gly Ala
115 120 125

Tyr Lys Leu Glu His Leu Thr Ser Val Arg Leu Met Ile Arg Ala Asp
130 135 140

Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
145 150 155 160

Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
165 170 175

Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Leu
180 185 190

Ser Gln Asp Pro Glu Thr Lys Leu Tyr Met Ile Ser Ser Glu Leu Asp
195 200 205

Phe Asn Met Thr Ser Asn His Ser Phe Leu Cys Leu Val Lys Tyr Gly
210 215 220

Asp Leu Thr Val Ser Gln Thr Phe Tyr Trp Gln Glu Ser Lys Pro Thr
225 230 235 240

Pro Ser Ala Asn Gln His Leu Thr Trp Thr Ile Ile Ile Pro Val Ser
245 250 255

Ala Phe Gly Ile Ser Val Ile Ile Ala Val Ile Leu Thr Cys Leu Thr
260 265 270

Cys Arg Asn Ala Ala Ile Arg Arg Gln Arg Arg Glu Asn Glu Val Glu
275 280 285

Met Gln Ser Cys Ser Gln Ser Pro

<210> 272

<211> 302

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 272

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
 1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
 20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
 35 40 45

Met Leu Ser Cys Asp Tyr Ser Thr Ser Thr Glu Glu Leu Thr Ser Leu
 50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
 65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Phe Pro Asp
 85 90 95

Ile Ile Asn Asn Leu Ser Leu Met Ile Leu Ala Leu Arg Leu Ser Asp
 100 105 110

Arg Gly Thr Tyr Thr Cys Val Val Gln Lys Asn Gly Asn Gly Ser Phe
 115 120 125

Arg Arg Glu His Leu Thr Ser Val Thr Leu Ser Ile Arg Ala Asp Phe
 130 135 140

Pro Val Pro Ser Ile Thr Asp Ile Gly His Pro Ala Pro Asn Val Lys
 145 150 155 160

Arg Ile Arg Cys Ser Ala Ser Gly Gly Phe Pro Glu Pro Arg Leu Ala
 165 170 175

Trp Met Glu Asp Gly Glu Glu Leu Asn Ala Val Asn Thr Thr Val Asp
 180 185 190

Gln Asp Leu Asp Thr Glu Leu Tyr Ser Val Gly Ser Glu Leu Asp Phe
 195 200 205

Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly Glu
 210 215 220

Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu Pro
 225 230 235 240

Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly Ala
245 250 255

Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Arg Arg His Val
260 265 270

Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr Glu
275 280 285

Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
290 295 300

<210> 273

<211> 867

<212> DNA

<213> Homo sapiens

<400> 273

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cagctcttgg tgctggctgg tctttctcac ttctgttcag gtgttatcca cgtgaccaag 120
gaagtgaag aagtggcaac gctgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaactcgca tctactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagta caagaaccgg accatctttg atatcactaa taacctctcc 300
attgtgatcc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgaag 360
tatgaaaaag acgctttcaa gcgggaacac ctggctgaag tgacgttatt agtcaaagct 420
gacttccccta cacctagtat atctgacttt gaaattccaa cttctaatat tagaaggata 480
atttgctcaa cctctggagg ttttctgag cctcacctct cctggctgga aaatggagaa 540
gaattaaatg ccatcaacac aacagtttcc caagatcctg aaactgagct ctatgctgtt 600
agcagcaaac tggatttcaa tatgacaacc aaccacagct tcatgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tggaatacaa ccaagcaaga gcattttcct 720
gataacctgc tcccatcctg ggccattacc ttaatctcag taaatggaat ttttgtgata 780
tgctgcctga cctactgctt tgccccaaga tgcagagaga gaaggaggaa tgagagattg 840
agaagggaaa gtgtacgccc tgtatga                                     867
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<210> 274

<211> 867

<212> DNA

<213> Macaca sp.

<400> 274

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gaagtgaag aagtggcaac gctgtcctgt ggtcacaatg tttctgttga agagctggca 180
caaactcgca tctactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240
atgaatatat ggcccagta caagaaccgg accatctttg atatcacaaa taacctctcc 300
attgtgattc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgaag 360
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gacttccccta cacctagtat aactgactct gaaattccac cttctaatat tagaaggata 480
atttgctcaa actctggagg ttttccagag cctcacctct cctggttgga aaatggagaa 540
gaattaaatg ccatcagcac aacagtttcc caagatcctg aaactgagct ctatactgtt 600
agcagcaaac tggatttcaa tatgacaacc aatcacagtt tcatgtgtct catcaagtat 660
ggacatttaa gagtgaatca gaccttcaac tggaacacac ccaagcaaga gcattttcct 720
gataacctgc tcccatcctg ggccattacc ctaatctcag taaatggaat ttttgtgata 780
tgctgcctga cctactgttt tgccccaagg tgcagagaga gaagaaggaa tgagacattg 840
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<210> 275

<211> 888

<212> DNA

<213> Bovine sp.

<400> 275

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acaaaaagag tgaaagaaac agtaatgcta tctgtgtgatt acaacacatc cactgaagaa 180
ctgacaagcc ttcggtatcta ttggcaaaaag gatagtaaaa tgggtgctggc catcctgcct 240
ggaaaagtgc aggtgtggcc tgaatacaag aaccgcacca tcaatgacat gaacgataac 300
ccccgcattg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
cagaagcctg atttgaaagg ggcttataaa ctggagcacc tgacttccgt gaggttaatt 420
atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
agaaggctaa tttgctcaac ctctggaggt ttccaaggc cccacctcta ctggttgaa 540
aatggagaag aattaaatgc taccaacaca acactgtccc aagatcctga aaccaagctc 600
tacatgatta gcagtgaact ggatttcaac atgacaagca atcacagctt cttgtgtctt 660
gtcaagtatg gagacttaac agtgtcacag accttctact ggcaagaatc caaaccaacc 720
ccttctgcta atcagcacct gacctggacc attattatcc cagtctcagc atttgggatt 780
tctgtgatca ttgcagttat actaacatgc ctgacctgca gaaatgctgc aatacgaga 840
cagagaaggg agaataagtg ggaaatggaa agttgtcttc agtctcca 888

<210> 276

<211> 900

<212> DNA

<213> Oryctolagus cuniculus

<400> 276

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gtgaaagaaa tggcagcact gtctgtgat tacaacattt ctatcgatga actggcgaga 180
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gaagtgtggc ctgagtacaa gaaccgcacc ttccccgaca tcattaacaa cctctccctt 300
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gagaacgggt ctttcagacg ggagcacctg acctccgtga cactgtccat cagagctgac 420
ttccctgtcc ctacataac tgacattgga catcccgacc ctaatgtgaa aaggataaga 480
tgctccgcct ctggagggtt tccagagcct cgctcgcct ggatggaaga tggagaagaa 540
ctaaacgccg tcaacacgac ggttgaccag gatttgaca cggagctcta cagcgtcagc 600
agtgaactgg atttcaatgt gacaaataac cacagcatcg tgtgtctcat caaatacggg 660
gagctgtcgg tgtcacagat cttcccttgg agcaaacca agcaggagcc tcccattgat 720
cagcttccat tctgggtcat tatcccagta agtggtgctt tgggtgctac tgcggtagtt 780
ctctactgcc tggcctgcag acatgttgcg aggtggaaaa gaacaagaag gaatgaagag 840
acagtgggaa ctgaaaggct gtcccctatc tacttaggct ctgcgcaatc ctcgggctga 900

<210> 277

<211> 941

<212> DNA

<213> Felis domesticus

<400> 277

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acagtggag aagtagcagt actatcctgt gattacaaca tttccaccaa agaactgacg 180
 gaaattcgaa tctattggca aaaggatgat gaaatgggtg tggctgtcat gtctggcaaa 240
 gtacaagtgt ggcccaagta caagaaccgc acattcactg acgtcaccga taaccactcc 300
 attgtgatca tggctctgcg cctgtcagac aatggcaaat acactgttat tattcaaaag 360
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 atgtgcttaa cttctggagg tttccaaag cctcacctct cctggctgga aaatgaagaa 540
 gaattaaatg ccatcaacac aacagtttcc caagatcctg aaactgagct ctacactatt 600
 agcagtgaac tggatttcaa tatgacaaac aaccatagct tctgtgtct tgtcaagtat 660
 ggaaacttac tagtatcaca gatcttcaac tggcaaaaat cagagccaca gccttctaata 720
 aatcagctct ggatcattat cctgagctca gtagtaagtg ggattgttgt gatcactgca 780
 cttaccttaa gatgcctagt ccacagacct gctgcaagggt ggagacaaaag agaaatgggg 840
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<210> 278

<211> 288

<212> PRT

<213> Homo sapiens

<400> 278

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 Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
 35 40 45
 Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
 50 55 60
 Tyr Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
 65 70 75 80
 Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
 85 90 95
 Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
 100 105 110
 Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
 115 120 125
 Glu His Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr
 130 135 140
 Pro Ser Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile
 145 150 155 160
 Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu
 165 170 175
 Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp
 180 185 190

Pro Glu Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met
195 200 205

Thr Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg
210 215 220

Val Asn Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro
225 230 235 240

Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly
245 250 255

Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg
260 265 270

Glu Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val Arg Pro Val
275 280 285

<210> 279

<211> 288

<212> PRT

<213> Macaca sp.

<400> 279

Met Gly His Thr Arg Arg Gln Gly Ile Ser Pro Ser Lys Cys Pro Tyr
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Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Cys Leu Ser His Leu Cys
20 25 30

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
35 40 45

Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
50 55 60

Tyr Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
65 70 75 80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
85 90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
100 105 110

Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
115 120 125

Glu His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr
130 135 140

Pro Ser Ile Thr Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
145 150 155 160

Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro Arg Leu Ser Trp Leu

165

170

175

Glu Asn Gly Glu Glu Leu Asn Ala Ile Ser Thr Thr Val Ser Gln Asp
180 185 190

Pro Glu Thr Glu Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met
195 200 205

Thr Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg
210 215 220

Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
225 230 235 240

Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly
245 250 255

Ile Phe Val Ile Cys Cys Leu Thr His Cys Phe Ala Pro Arg Cys Arg
260 265 270

Glu Arg Arg Arg Asn Glu Thr Leu Arg Arg Glu Ser Val Arg Pro Val
275 280 285

<210> 280

<211> 296

<212> PRT

<213> Bovine sp.

<400> 280

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
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Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
100 105 110

Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Asp Leu Lys Gly Ala
115 120 125

Tyr Lys Leu Glu His Leu Thr Ser Val Arg Leu Met Ile Arg Ala Asp
130 135 140

Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
145 150 155 160

Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
165 170 175

Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Leu
180 185 190

Ser Gln Asp Pro Glu Thr Lys Leu Tyr Met Ile Ser Ser Glu Leu Asp
195 200 205

Phe Asn Met Thr Ser Asn His Ser Phe Leu Cys Leu Val Lys Tyr Gly
210 215 220

Asp Leu Thr Val Ser Gln Thr Phe Tyr Trp Gln Glu Ser Lys Pro Thr
225 230 235 240

Pro Ser Ala Asn Gln His Leu Thr Trp Thr Ile Ile Ile Pro Val Ser
245 250 255

Ala Phe Gly Ile Ser Val Ile Ile Ala Val Ile Leu Thr Cys Leu Thr
260 265 270

Cys Arg Asn Ala Ala Ile Arg Arg Gln Arg Arg Glu Asn Glu Val Glu
275 280 285

Met Gln Ser Cys Ser Gln Ser Pro
290 295

<210> 281

<211> 299

<212> PRT

<213> *Oryctolagus cuniculus*

<400> 281

Met Gly His Thr Leu Arg Pro Gly Thr Pro Leu Pro Arg Cys Leu His
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Leu Lys Leu Cys Leu Leu Leu Ala Leu Ala Gly Leu His Phe Ser Ser
20 25 30

Gly Ile Ser Gln Val Thr Lys Ser Val Lys Glu Met Ala Ala Leu Ser
35 40 45

Cys Asp Tyr Asn Ile Ser Ile Asp Glu Leu Ala Arg Met Arg Ile Tyr
50 55 60

Trp Gln Lys Asp Gln Gln Met Val Leu Ser Ile Ile Ser Gly Gln Val
65 70 75 80

Glu Val Trp Pro Glu Tyr Lys Asn Arg Thr Phe Pro Asp Ile Ile Asn
85 90 95

Asn Leu Ser Leu Met Ile Leu Ala Leu Arg Leu Ser Asp Lys Gly Thr
100 105 110

Tyr Thr Cys Val Val Gln Lys Asn Glu Asn Gly Ser Phe Arg Arg Glu
 115 120 125
 His Leu Thr Ser Val Thr Leu Ser Ile Arg Ala Asp Phe Pro Val Pro
 130 135 140
 Ser Ile Thr Asp Ile Gly His Pro Ala Pro Asn Val Lys Arg Ile Arg
 145 150 155 160
 Cys Ser Ala Ser Gly Gly Phe Pro Glu Pro Arg Leu Ala Trp Met Glu
 165 170 175
 Asp Gly Glu Glu Leu Asn Ala Val Asn Thr Thr Val Asp Gln Asp Leu
 180 185 190
 Asp Thr Glu Leu Tyr Ser Val Ser Ser Glu Leu Asp Phe Asn Val Thr
 195 200 205
 Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly Glu Leu Ser Val
 210 215 220
 Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu Pro Pro Ile Asp
 225 230 235 240
 Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly Ala Leu Val Leu
 245 250 255
 Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His Val Ala Arg Trp
 260 265 270
 Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr Glu Arg Leu Ser
 275 280 285
 Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly . .
 290 295

<210> 282
 <211> 292
 <212> PRT
 <213> Felis domesticus

<400> 282
 Met Gly His Ala Ala Lys Trp Lys Thr Pro Leu Leu Lys His Pro Tyr
 1 5 10 15
 Pro Lys Leu Phe Pro Leu Leu Met Leu Ala Ser Leu Phe Tyr Phe Cys
 20 25 30
 Ser Gly Ile Ile Gln Val Asn Lys Thr Val Glu Glu Val Ala Val Leu
 35 40 45
 Ser Cys Asp Tyr Asn Ile Ser Thr Lys Glu Leu Thr Glu Ile Arg Ile
 50 55 60
 Tyr Trp Gln Lys Asp Asp Glu Met Val Leu Ala Val Met Ser Gly Lys

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
 20 25 30
 Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
 35 40 45
 Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
 50 55 60
 Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
 65 70 75 80
 Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
 85 90 95
 Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
 100 105 110
 Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
 115 120 125
 Tyr Lys Leu Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp
 130 135 140
 Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
 145 150 155 160
 Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
 165 170 175
 Tyr Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Val
 180 185 190
 Ser Gln Asp Pro Asp Thr Glu Leu Tyr Met Ile Ser Ser Glu Leu Asp
 195 200 205
 Phe Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
 210 215 220
 Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
 225 230 235 240
 Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
 245 250 255
 Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
 260 265 270
 Val Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
 275 280 285
 Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<210> 284

<211> 303
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<220>
<221> MOD_RES
<222> (6)
<223> Lys or Glu

<220>
<221> MOD_RES
<222> (8)
<223> Arg or Gly

<220>
<221> MOD_RES
<222> (14)
<223> Arg or Cys

<220>
<221> MOD_RES
<222> (18)
<223> Trp or Arg

<220>
<221> MOD_RES
<222> (19)
<223> Pro or Leu

<220>
<221> MOD_RES
<222> (20)
<223> Ser or Pro

<220>
<221> MOD_RES
<222> (27)
<223> Asp or Gly

<220>
<221> MOD_RES
<222> (55)
<223> Asn or Ser

<220>
<221> MOD_RES
<222> (60)
<223> Glu or Lys

<220>
<221> MOD_RES
<222> (69)
<223> Gln or Arg

<220>
<221> MOD_RES
<222> (101)
<223> Pro or Leu

<220>
<221> MOD_RES
<222> (106)
<223> Leu or Gln

<220>
<221> MOD_RES
<222> (110)
<223> Pro or Leu

<220>
<221> MOD_RES
<222> (113)
<223> Lys or Ser

<220>
<221> MOD_RES
<222> (120)
<223> Val or Ile

<220>
<221> MOD_RES
<222> (124)
<223> Val or Asp

<220>
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<222> (135)
<223> Thr or Ala

<220>
<221> MOD_RES
<222> (149)
<223> Thr, Ser or deleted

<220>
<221> MOD_RES
<222> (150)
<223> Ile or deleted

<220>
<221> MOD_RES
<222> (151)
<223> Asn or Thr

<220>
<221> MOD_RES
<222> (167)
<223> Thr or deleted

<220>

<221> MOD_RES
<222> (168)
<223> Ser or deleted

<220>
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<222> (169)
<223> Gly or deleted

<220>
<221> MOD_RES
<222> (177)
<223> Cys or Tyr

<220>
<221> MOD_RES
<222> (192)
<223> Val or Leu

<220>
<221> MOD_RES
<222> (197)
<223> Gly or Glu

<220>
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<222> (199)
<223> Glu or Lys

<220>
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<223> Gly or Asp

<220>
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<222> (215)
<223> His or Arg

<220>
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<222> (218)
<223> Ala or Val

<220>
<221> MOD_RES
<222> (227)
<223> Ser or Leu

<220>
<221> MOD_RES
<222> (249)
<223> Trp, Leu or Arg

<220>
<221> MOD_RES
<222> (261)

<223> Ala or Thr

<220>

<221> MOD_RES

<222> (263)

<223> Val, Ala or Ile

<220>

<221> MOD_RES

<222> (267)

<223> Arg or Cys

<220>

<221> MOD_RES

<222> (268)

<223> Pro or Leu

<220>

<221> MOD_RES

<222> (273)

<223> Gly or Val

<400> 284

Met Gly His Thr Met Xaa Trp Xaa Ser Leu Pro Pro Lys Xaa Pro Cys
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Leu Xaa Xaa Xaa Gln Leu Leu Val Leu Thr Xaa Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Xaa Thr Ser Thr Glu Xaa Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Xaa Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
85 90 95

Met Asn Asp Asn Xaa Arg Ile Val Ile Xaa Ala Leu Arg Xaa Ser Asp
100 105 110

Xaa Gly Thr Tyr Thr Cys Val Xaa Gln Lys Pro Xaa Leu Lys Gly Ala
115 120 125

Tyr Lys Leu Glu His Leu Xaa Ser Val Arg Leu Met Ile Arg Ala Asp
130 135 140

Phe Pro Val Pro Xaa Xaa Xaa Asp Leu Gly Asn Pro Ser Pro Asn Ile
145 150 155 160

Arg Arg Leu Ile Cys Ser Xaa Xaa Xaa Gly Phe Pro Arg Pro His Leu
165 170 175

Xaa Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Xaa

180 185 190
 Ser Gln Asp Pro Xaa Thr Xaa Leu Tyr Met Ile Ser Ser Glu Leu Xaa
 195 200 205
 Phe Asn Val Thr Asn Asn Xaa Ser Ile Xaa Cys Leu Ile Lys Tyr Gly
 210 215 220
 Glu Leu Xaa Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
 225 230 235 240
 Pro Pro Ile Asp Cln Leu Pro Phe Xaa Val Ile Ile Pro Val Ser Gly
 245 250 255
 Ala Leu Val Leu Xaa Ala Xaa Val Leu Tyr Xaa Xaa Ala Cys Arg His
 260 265 270
 Xaa Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
 275 280 285
 Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<210> 285
 <211> 303
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 285
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 Leu Trp Pro Ser Gln Leu Leu Val Leu Thr Asp Leu Phe Tyr Phe Cys
 20 25 30
 Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
 35 40 45
 Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
 50 55 60
 Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
 65 70 75 80
 Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
 85 90 95
 Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Pro Ser Asp
 100 105 110
 Lys Gly Thr Tyr Thr Cys Val Val Gln Lys Pro Val Leu Lys Gly Ala
 115 120 125

Tyr Lys Leu Glu His Leu Thr Ser Val Arg Leu Met Ile Arg Ala Asp
 130 135 140
 Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
 145 150 155 160
 Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
 165 170 175
 Cys Trp Leu Glu Asn Gly Glu Glu Leu Asn Ala Thr Asn Thr Thr Val
 180 185 190
 Ser Gln Asp Pro Gly Thr Glu Leu Tyr Met Ile Ser Ser Glu Leu Gly
 195 200 205
 Phe Asn Val Thr Asn Asn His Ser Ile Ala Cys Leu Ile Lys Tyr Gly
 210 215 220
 Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
 225 230 235 240
 Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Pro Val Ser Gly
 245 250 255
 Ala Leu Val Leu Ala Ala Val Val Leu Tyr Arg Pro Ala Cys Arg His
 260 265 270
 Gly Ala Arg Trp Lys Arg Thr Arg Arg Asn Glu Glu Thr Val Gly Thr
 275 280 285
 Glu Arg Leu Ser Pro Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
 290 295 300

<210> 286

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Consensus
sequence

<400> 286

Met Gly His Thr Arg Arg Gln Gly Ile Ser Pro Ser Lys Cys Pro Tyr
 1 5 10 15
 Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Cys Leu Ser His Phe Cys
 20 25 30
 Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
 35 40 45
 Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
 50 55 60

His Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
 65 70 75 80
 Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
 85 90 95
 Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
 100 105 110
 Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
 115 120 125
 Glu His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr
 130 135 140
 Pro Ser Ile Ser Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
 145 150 155 160
 Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu
 165 170 175
 Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp
 180 185 190
 Pro Glu Thr Glu Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met
 195 200 205
 Thr Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg
 210 215 220
 Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
 225 230 235 240
 Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly
 245 250 255
 Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg
 260 265 270
 Glu Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val Arg Pro Val
 275 280 285

<210> 287

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<220>

<221> MOD_RES

<222> (12)

<223> Ser or Pro

<220>
<221> MOD_RES
<222> (25)
<223> Leu or Met

<220>
<221> MOD_RES
<222> (29)
<223> Ser or Pro

<220>
<221> MOD_RES
<222> (40)
<223> Lys or Arg

<220>
<221> MOD_RES
<222> (122)
<223> Glu or Asp

<220>
<221> MOD_RES
<222> (129)
<223> Glu or Lys

<220>
<221> MOD_RES
<222> (164)
<223> Thr or Ala

<220>
<221> MOD_RES
<222> (196)
<223> Glu or Gly

<220>
<221> MOD_RES
<222> (219)
<223> Lys or Arg

<220>
<221> MOD_RES
<222> (241)
<223> Asp or Asn

<400> 287
Met Gly His Thr Arg Arg Gln Gly Thr Ser Pro Xaa Lys Cys Pro Tyr
1 5 10 15

Leu Lys Phe Phe Gln Leu Leu Val Xaa Ala Cys Leu Xaa His Leu Cys
20 25 30

Ser Gly Val Ile His Val Thr Xaa Glu Val Lys Glu Val Ala Thr Leu
35 40 45

Ser Cys Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
50 55 60

His Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
 65 70 75 80
 Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
 85 90 95
 Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
 100 105 110
 Thr Tyr Glu Cys Val Val Leu Lys Tyr Xaa Lys Asp Ala Phe Lys Arg
 115 120 125
 Xaa His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr
 130 135 140
 Pro Ser Ile Thr Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
 145 150 155 160
 Ile Cys Ser Xaa Ser Gly Gly Phe Pro Glu Pro His Leu Phe Trp Leu
 165 170 175
 Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp
 180 185 190
 Pro Glu Thr Xaa Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met
 195 200 205
 Thr Ala Asn His Ser Phe Met Cys Leu Ile Xaa Tyr Gly His Leu Arg
 210 215 220
 Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
 225 230 235 240
 Xaa Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Ala Asn Gly
 245 250 255
 Ile Phe Val Ile Cys Cys Leu Thr Tyr Arg Phe Ala Pro Arg Cys Arg
 260 265 270
 Glu Arg Lys Ser Asn Glu Thr Leu Arg Arg Glu Ser Val Cys Pro Val
 275 280 285

<210> 288

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 288

Met Gly His Thr Arg Arg Gln Gly Thr Ser Pro Pro Glu Cys Pro Tyr
 1 5 10 15

Leu Lys Phe Phe Gln Leu Leu Val Met Ala Cys Leu Pro His Leu Cys
 20 25 30
 Ser Gly Val Ile His Val Thr Arg Glu Val Lys Glu Val Ala Thr Leu
 35 40 45
 Pro Cys Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Pro Ile
 50 55 60
 His Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
 65 70 75 80
 Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
 85 90 95
 Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
 100 105 110
 Thr Tyr Glu Cys Val Val Leu Lys Tyr Asp Lys Asp Ala Phe Lys Gln
 115 120 125
 Lys His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr
 130 135 140
 Pro Ser Ile Thr Asp Phe Glu Ile Pro Pro Ser Asn Ile Lys Arg Ile
 145 150 155 160
 Ile Cys Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Phe Gly Leu
 165 170 175
 Glu Asn Gly Glu Glu Ile Asn Ala Ile Asn Thr Thr Val Ser Gln Asp
 180 185 190
 Pro Glu Thr Gly Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met
 195 200 205
 Thr Ala Asp His Asn Phe Met Cys Leu Ile Arg Tyr Gly His Leu Arg
 210 215 220
 Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
 225 230 235 240
 Asn Asn Pro Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Ala Asn Gly
 245 250 255
 Ile Phe Val Ile Cys Cys Pro Thr Tyr Arg Phe Ala Pro Gly Cys Arg
 260 265 270
 Glu Arg Lys Ser Asn Glu Thr Leu Arg Arg Glu Ser Val Cys Pro Val
 275 280 285

<210> 289

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 289

Met Gly His Thr Arg Arg Gln Gly Thr Ser Pro Ser Lys Cys Pro Tyr
1 5 10 15
Leu Lys Phe Phe Gln Leu Leu Val Leu Ala Cys Leu Ser His Leu Cys
20 25 30
Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
35 40 45
Ser Cys Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
50 55 60
His Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
65 70 75 80
Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
85 90 95
Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
100 105 110
Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
115 120 125
Glu His Leu Ala Glu Val Met Leu Ser Val Lys Ala Asp Phe Pro Thr
130 135 140
Pro Ser Ile Thr Asp Phe Glu Ile Pro Pro Ser Asn Ile Arg Arg Ile
145 150 155 160
Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Phe Trp Leu
165 170 175
Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp
180 185 190
Pro Glu Thr Glu Leu Tyr Thr Val Ser Ser Lys Leu Asp Phe Asn Met
195 200 205
Thr Ala Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg
210 215 220
Val Asn Gln Thr Phe Asn Trp Asn Thr Pro Lys Gln Glu His Phe Pro
225 230 235 240
Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Ala Asn Gly
245 250 255
Ile Phe Val Ile Cys Cys Leu Thr Tyr Arg Phe Ala Pro Arg Cys Arg
260 265 270
Glu Arg Lys Ser Asn Glu Thr Leu Arg Arg Glu Ser Val Cys Pro Val

<210> 290
<211> 275
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<220>
<221> MOD_RES
<222> (50)
<223> Leu or Pro

<220>
<221> MOD_RES
<222> (55)
<223> Asn or Ser

<220>
<221> MOD_RES
<222> (56)
<223> Ala or Thr

<220>
<221> MOD_RES
<222> (113)
<223> Ser or Lys

<220>
<221> MOD_RES
<222> (120)
<223> Ile or Val

<220>
<221> MOD_RES
<222> (123)
<223> Pro or deleted

<220>
<221> MOD_RES
<222> (124)
<223> Val, Asn or Asp

<220>
<221> MOD_RES
<222> (125)
<223> Leu or Glu

<220>
<221> MOD_RES
<222> (126)
<223> Lys or Asn

<220>
<221> MOD_RES
<222> (128)
<223> Ala or Ser

<220>
<221> MOD_RES
<222> (129)
<223> Tyr or Phe

<220>
<221> MOD_RES
<222> (130)
<223> Lys or Arg

<220>.
<221> MOD_RES
<222> (131)
<223> Leu or Arg

<220>
<221> MOD_RES
<222> (135)
<223> Ala or Thr

<220>
<221> MOD_RES
<222> (138)
<223> Arg or Thr

<220>
<221> MOD_RES
<222> (140)
<223> Met or Ser

<220>
<221> MOD_RES
<222> (170)
<223> Asp or Gly

<220>
<221> MOD_RES
<222> (193)
<223> Asp or deleted

<220>
<221> MOD_RES
<222> (194)
<223> Gln or deleted

<220>
<221> MOD_RES
<222> (195)
<223> Asp or deleted

<220>
<221> MOD_RES

<222> (209)
<223> Variable amino acid

<220>
<221> MOD_RES
<222> (211)
<223> Val or Ala

<220>
<221> MOD_RES
<222> (252)
<223> Ile or Val

<220>
<221> MOD_RES
<222> (253)
<223> Leu or Pro

<400> 290

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Xaa Ser Cys Asp Tyr Xaa Xaa Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
100 105 110

Xaa Gly Thr Tyr Thr Cys Val Xaa Gln Lys Xaa Xaa Xaa Xaa Gly Xaa
115 120 125

Xaa Xaa Xaa Glu His Leu Xaa Ser Val Xaa Leu Xaa Ile Arg Ala Asp
130 135 140

Phe Pro Val Pro Ser Ile Thr Asp Ile Gly His Pro Ala Pro Asn Val
145 150 155 160

Lys Arg Ile Arg Cys Ser Ala Ser Gly Xaa Phe Pro Glu Pro Arg Leu
165 170 175

Ala Trp Met Glu Asp Gly Glu Glu Leu Asn Ala Val Asn Thr Thr Val
180 185 190

Xaa Xaa Xaa Leu Asp Thr Glu Leu Tyr Ser Val Ser Ser Glu Leu Asp
195 200 205

Xaa Asn Xaa Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
210 215 220

Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
225 230 235 240

Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Xaa Xaa Val Ser Gly
245 250 255

Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
260 265 270

Val Ala Arg
275

<210> 291

<211> 275

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 291

Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30

Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Asn Ala Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
100 105 110

Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Val Leu Lys Gly Ala
115 120 125

Tyr Lys Leu Glu His Leu Ala Ser Val Arg Leu Met Ile Arg Ala Asp
130 135 140

Phe Pro Val Pro Ser Ile Thr Asp Ile Gly His Pro Ala Pro Asn Val
145 150 155 160

Lys Arg Ile Arg Cys Ser Ala Ser Gly Asp Phe Pro Glu Pro Arg Leu
 165 170 175
 Ala Trp Met Glu Asp Gly Glu Glu Leu Asn Ala Val Asn Thr Thr Val
 180 185 190
 Asp Gln Asp Leu Asp Thr Glu Leu Tyr Ser Val Ser Ser Glu Leu Asp
 195 200 205
 Ser Asn Val Thr Asn Asn His Ser Ile Val Cys Leu Ile Lys Tyr Gly
 210 215 220
 Glu Leu Ser Val Ser Gln Ile Phe Pro Trp Ser Lys Pro Lys Gln Glu
 225 230 235 240
 Pro Pro Ile Asp Gln Leu Pro Phe Trp Val Ile Ile Leu Val Ser Gly
 245 250 255
 Ala Leu Val Leu Thr Ala Val Val Leu Tyr Cys Leu Ala Cys Arg His
 260 265 270
 Val Ala Arg
 275

<210> 292
 <211> 296
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<220>
 <221> MOD_RES
 <222> (9)
 <223> Thr or Ser

<220>
 <221> MOD_RES
 <222> (35)
 <223> Ile or Thr

<220>
 <221> MOD_RES
 <222> (55)
 <223> Asn or Ser

<220>
 <221> MOD_RES
 <222> (110)
 <223> Leu or Pro

<220>
 <221> MOD_RES
 <222> (124)

<223> Asp or Val

<220>

<221> MOD_RES

<222> (135)

<223> Thr or Ala

<220>

<221> MOD_RES

<222> (183)

<223> Lys or Glu

<220>

<221> MOD_RES

<222> (192)

<223> Leu or Val

<220>

<221> MOD_RES

<222> (211)

<223> Met or Thr

<220>

<221> MOD_RES

<222> (215)

<223> His or deleted

<220>

<221> MOD_RES

<222> (216)

<223> Ser or deleted

<220>

<221> MOD_RES

<222> (217)

<223> Phe or deleted

<220>

<221> MOD_RES

<222> (231)

<223> Thr or Ser

<220>

<221> MOD_RES

<222> (288)

<223> Lys or Glu

<220>

<221> MOD_RES

<222> (290)

<223> Glu or Gln

<400> 292

Met Gly His Thr Met Lys Trp Gly Xaa Leu Pro Pro Lys Arg Pro Cys
1 5 10 15

Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys

20

25

30

Ser Gly Xaa Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45

Met Leu Ser Cys Asp Tyr Xaa Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60

Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80

Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
85 90 95

Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Xaa Ser Asp
100 105 110

Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Xaa Leu Lys Gly Ala
115 120 125

Tyr Lys Leu Glu His Leu Xaa Ser Val Arg Leu Met Ile Arg Ala Asp
130 135 140

Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
145 150 155 160

Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
165 170 175

Tyr Trp Leu Glu Asn Gly Xaa Glu Leu Asn Ala Thr Asn Thr Thr Xaa
180 185 190

Ser Gln Asp Pro Glu Thr Lys Leu Tyr Met Ile Ser Ser Glu Leu Asp
195 200 205

Phe Asn Xaa Thr Ser Asn Xaa Xaa Xaa Leu Cys Leu Val Lys Tyr Gly
210 215 220

Asp Leu Thr Val Ser Gln Xaa Phe Tyr Trp Gln Glu Ser Lys Pro Thr
225 230 235 240

Pro Ser Ala Asn Gln His Leu Thr Trp Thr Ile Ile Ile Pro Val Ser
245 250 255

Ala Phe Gly Ile Ser Val Ile Ile Ala Val Ile Leu Thr Cys Leu Thr
260 265 270

Cys Arg Asn Ala Ala Ile Arg Arg Gln Arg Arg Glu Asn Glu Val Xaa
275 280 285

Met Xaa Ser Cys Ser Gln Ser Pro
290 295

<210> 293

<211> 296

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 293

Met Gly His Thr Met Lys Trp Gly Thr Leu Pro Pro Lys Arg Pro Cys
1 5 10 15
Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30
Ser Gly Ile Thr Pro Lys Ser Val Thr Lys Arg Val Lys Glu Thr Val
35 40 45
Met Leu Ser Cys Asp Tyr Asn Thr Ser Thr Glu Glu Leu Thr Ser Leu
50 55 60
Arg Ile Tyr Trp Gln Lys Asp Ser Lys Met Val Leu Ala Ile Leu Pro
65 70 75 80
Gly Lys Val Gln Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Thr Asp
85 90 95
Met Asn Asp Asn Pro Arg Ile Val Ile Leu Ala Leu Arg Leu Ser Asp
100 105 110
Ser Gly Thr Tyr Thr Cys Val Ile Gln Lys Pro Asp Leu Lys Gly Ala
115 120 125
Tyr Lys Leu Glu His Leu Thr Ser Val Arg Leu Met Ile Arg Ala Asp
130 135 140
Phe Pro Val Pro Thr Ile Asn Asp Leu Gly Asn Pro Ser Pro Asn Ile
145 150 155 160
Arg Arg Leu Ile Cys Ser Thr Ser Gly Gly Phe Pro Arg Pro His Leu
165 170 175
Tyr Trp Leu Glu Asn Gly Lys Glu Leu Asn Ala Thr Asn Thr Thr Leu
180 185 190
Ser Gln Asp Pro Glu Thr Lys Leu Tyr Met Ile Ser Ser Glu Leu Asp
195 200 205
Phe Asn Met Thr Ser Asn His Ser Phe Leu Cys Leu Val Lys Tyr Gly
210 215 220
Asp Leu Thr Val Ser Gln Thr Phe Tyr Trp Gln Glu Ser Lys Pro Thr
225 230 235 240
Pro Ser Ala Asn Gln His Leu Thr Trp Thr Ile Ile Ile Pro Val Ser
245 250 255
Ala Phe Gly Ile Ser Val Ile Ile Ala Val Ile Leu Thr Cys Leu Thr
260 265 270

Cys Arg Asn Ala Ala Ile Arg Arg Gln Arg Arg Glu Asn Glu Val Lys
275 280 285

Met Glu Ser Cys Ser Gln Ser Pro
290 295

<210> 294

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 294

Asn Lys Asp Ser Lys Met Val Val Ala Ile Leu Pro Gly Lys Val Gln
1 5 10 15

Val Phe Pro Glu Tyr Lys Asn Lys Thr Ile
20 25

<210> 295

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 295

Gln Lys Asp Ala Lys Met Val Leu Ala Ile Leu Pro Gly Arg Val Gln
1 5 10 15

Met Trp Pro Glu Tyr Lys Gln Arg Thr Ile
20 25

<210> 296

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic FLAG
tag

<400> 296

Asp Tyr Lys Asp Asp Asp Asp Lys
1 5

<210> 297

<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Illustrative
conserved peptide

<400> 297
Met Tyr Pro Pro Pro Tyr
1 5

<210> 298
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Illustrative
non-dimerizing Ig-Fc domain

<400> 298
Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro
1 5 10

<210> 299
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Poly-His tag

<400> 299
His His His His His
1 5

<210> 300
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Illustrative
factor Xa cleavage site

<400> 300
Ile Glu Gly Arg
1

<210> 301
<211> 14
<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 301

Pro Lys Ser Ser Asp Lys Thr His Thr Ser Pro Pro Ser Pro
1 5 10

<210> 302

<211> 46

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 302

acacatagcg ccggcgctag ctgagcaaaa ggccagcaaa aggcca

46

<210> 303

<211> 60

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 303

aactctgtga gacaacagtc ataaatgtac agatatcaga ccaagtttac tcatatatac 60

<210> 304

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 304

ggcttctcac agagtggcgc gccgtgtctc aaaatctct

39

<210> 305

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 305

ttgctcagct agcgccggcg ccgtcccgtc aagtcagcgt

40

<210> 306
<211> 40
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 306
agatctgttt aaaccgctga tcagcctcga ctgtgccttc

40

<210> 307
<211> 40
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 307
acctaacc actctgtgag aagccataga gccaccgca

40

<210> 308
<211> 53
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 308
ggatccgcta cctctagaga attcggcggc cgcagatctg tttaaaccgc tga

53

<210> 309
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 309
ggatccactc atctagaaca atggtaccaa tacgaattcg gcggccgcag atctgtttaa 60
acc 63

<210> 310
<211> 16
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Consensus
terminator sequence

<400> 310
atcaaaatta ggaaga

16

<210> 311
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Illustrative
silent variation oligonucleotide

<400> 311
atgggacata cgatg

15

<210> 312
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Illustrative
peptide

<400> 312
Leu Tyr Pro Pro Pro Pro Tyr
1 5

<210> 313
<211> 80
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 313
gatctgttta aactctggct aataaaagat cagagctcta gacatctgtg tgttggtttt 60
ttgtgtgtct cactcacaga 80

<210> 314
<211> 72
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 314
tgagtgagac acacaaaaaa ccaacacaca gatgtctaga gctctgatct tttattagcc 60
agagtttaaa ca 72

<210> 315
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
signal peptide

<400> 315
Met Gly His Thr Met Lys Trp Gly Ser Leu Pro Pro Lys Arg Pro Cys
1 5 10 15
Leu Trp Leu Ser Gln Leu Leu Val Leu Thr Gly Leu Phe Tyr Phe Cys
20 25 30
Ser Gly

<210> 316
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
transcription factor GCN4

<400> 316
Arg Met Lys Gln Leu Glu Asp Lys Val Glu Glu Leu Leu Ser Lys Asn
1 5 10 15
Tyr His Leu Glu Asn Glu Cys Ala Arg Leu Lys Lys Leu Val Gly Glu
20 25 30
Arg

<210> 317
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
transcription factor Fos

<400> 317
Leu Thr Asp Thr Leu Gln Ala Glu Thr Asp Gln Leu Glu Asp Lys Lys
1 5 10 15
Ser Ala Leu Gln Thr Glu Ile Ala Asn Leu Leu Lys Glu Lys Glu Lys

20

25

30

Leu Glu Phe Ile Leu Ala Ala
35

<210> 318
<211> 39
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
transcription factor Jun

<400> 318

Arg Ile Ala Arg Leu Glu Glu Lys Val Lys Thr Leu Lys Ala Gln Asn
1 5 10 15

Ser Glu Leu Ala Ser Thr Ala Asn Met Leu Arg Glu Gln Val Ala Gln
20 25 30

Leu Lys Gln Lys Val Met Asn
35

<210> 319
<211> 18
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
vector backbone pCDNA3.1

<220>

<221> misc_feature

<222> (9)..(10)

<223> These bases are connected by a GCN4 linker

<400> 319

gcggccgcat aggggccc

18

<210> 320
<211> 10
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Illustrative
peptide

<400> 320

Ile Tyr Leu Gly Ser Ala Gln Ser Ser Gly
1 5 10